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DEMOGRAPHIC
STATE OF THE STATE

A Report to the Governor and Legislature on Demographic Trends for the State of Oklahoma

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October, 1987

Demographic State of the State
1987

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The authors gratefully acknowledge the invaluable assistance of Jeff Wallace, for constructing the graphs in this report, and of Sherry Poe, for preparing the text for publication.

Contents

List of Figures i
List of Tables ii
Executive Summary iv

I. INTRODUCTION 1

Objectives 1
Organization of the Report 2
Data Sources 2
Limitations of the Data 2

II. POPULATION SIZE AND GROWTH: PAST AND FUTURE 4

Components of Population Change 4
History of Population Growth in Oklahoma 5
Comparison to Other States in the Region 8
Projected Future Growth 12

III. DEMOGRAPHIC COMPOSITION AND POLICY IMPLICATIONS 20

Introduction 20
Age Composition 21
Policy Implications of a Changing Age Structure 25
Sex Composition 33
Conclusion 36

IV. OKLAHOMA MIGRATION, DEMOGRAPHIC, SOCIAL AND ECONOMIC IMPACT: 1975-1980 38

Introduction 38
Oklahoma Migration Trends: 1950-1986 39
Origin, Destination, and Volume of Oklahoma Migrants 40
Demographic and Socioeconomic Characteristics of Oklahoma Migrants 43
Conclusion 58

V. CONCLUSION 61

Appendix Tables 64

LIST OF FIGURES

Number	Name of Figure	Page
2.1	Components of Population Growth for Oklahoma: 1920-1985	6
2.2	Population for Oklahoma and Selected States: 1980-2010	9
2.3	Total Fertility Rates, Oklahoma, Selected States and U.S.: 1950-1980	10
2.4	Percent Change in Population, Oklahoma, United States and the Region: 1910-2000	13
2.5	Census and Projected Population for Oklahoma and Selected States: 1950-2000	14
2.6	Projected Population Under Three Migration Assumptions for Oklahoma: 1950-2010	16
2.7	Projected Population by Age Under Three Migration Assumptions for Oklahoma: 1950-2010	17
3.1	Age-Sex Pyramids for Oklahoma and the United States: 1980 and 2010	24
3.2	Elementary, High School and College Age Population, Oklahoma: 1950-2010	28
4.1	Major Census Regions in the U.S.	41
4.2	Inmigrants by Region/State: 1975-1980	41
4.3	Outmigrants by Region/State: 1975-1980	42
4.4	Inmigrants and Outmigrants by Age, Oklahoma: 1975-1980	44
4.5	Inmigrants and Outmigrants by Race, Oklahoma: 1975-1980	46
4.6	Inmigrants and Outmigrants by Marital Status, (Persons 15 Years and Older), Oklahoma: 1975-1980	47
4.7	Inmigrants and Outmigrants by Years of School Completed (25 Years and Above), Oklahoma: 1975-1980	49
4.8	Inmigrants and Outmigrants by Employment Status (16 Years and Above), Oklahoma: 1975-1980	52
4.9	Inmigrants and Outmigrants by Occupation (16 Years and Above) Oklahoma: 1975-1980	54
4.10	Inmigrants and Outmigrants by Industry (16 Years and Over) Oklahoma: 1975-1980	56
4.11	Inmigrants and Outmigrants by Income (Age 15 and Above) Oklahoma: 1975-1980	57

LIST OF TABLES

Number Name of Table Page

Text Tables

2.1 Components of Population Change for Oklahoma: 1920-2010 7
2.2 Projected Population for Oklahoma Under Low, Medium and High Migration Assumptions: 1980-2010 15
3.1 Median Age of Population, United States and Oklahoma: 1980-2010 22
3.2 Number and Percent of Working Age Population, Age 18 to 64 Years, United States and Oklahoma: 1980-2010 26
3.3 Number and Percent of the Elderly Population, Oklahoma and United States: 1980-2010 31
3.4 Number of Dependents Per 100 Persons Aged 18 to 64, United States and Oklahoma: 1980-2010 33
3.5 Sex Ratios for Selected Age Groups, United States and Oklahoma: 1980-2010 35

Appendix Tables

A.1 Components of Population Change for Oklahoma, Selected States and the United States: 1950-1980 65
A.2 Annual Components of Population Change, Oklahoma: 1980-1986 66
A.3 Total Fertility Rates for Oklahoma and Selected States: 1950-1980 67
A.4 Census Population, Estimated and Projected Population for Oklahoma, Selected States and the United States: 1900-2000 68
A.5 Percent Change in Population for Oklahoma, Selected States and the United States: 1900-2000 69
A.6 Percent Distribution of the Population of Oklahoma, by Age and Sex: 1980-2010 70
A.7 Percent Distribution of the Population of the United States, by Age and Sex: 1980-2010 71
A.8 Percent Distribution of the Population of United States and Oklahoma, by Age: 1980-2010 72
A.9 Number and Percent of Elementary, High School and College Age Population, Age 5 to 24 Years, Oklahoma and United States: 1980-2010 73
A.10 Number and Percent of Inmigrants, Outmigrants and Net Migrants by Region/State, Oklahoma: 1975-1980 74
A.11 Number and Percent of Total Inmigrants, Outmigrants and Net Migrants by Age, Oklahoma: 1975-1980 75

LIST OF TABLES (Continued)

Number	Name of Table	Page
A.12	Number and Percent of Male Inmigrants, Outmigrants and Net Migrants by Age, Oklahoma: 1975-1980	76
A.13	Number and Percent of Female Inmigrants, Outmigrants and Net Migrants by Age, Oklahoma: 1975-1980	77
A.14	Number and Percent of Inmigrants, Outmigrants and Net Migrants by Race, Oklahoma: 1975-1980	78
A.15	Number and Percent of Inmigrants, Outmigrants and Net Migrants by Marital Status and Sex, Age 15 Years and Above, Oklahoma: 1975-1980	79
A.16	Number and Percent of Inmigrants, Outmigrants and Net Migrants by Years of School Completed and Sex, Age 25 Years and Above, Oklahoma: 1975-1980	80
A.17	Number and Percent of Inmigrants, Outmigrants and Net Migrants by Employment Status and Sex, Age 16 Years and Above, Oklahoma: 1975-1980	81
A.18	Number and Percent of Inmigrants, Outmigrants and Net Migrants by Occupation, Age 16 Years and Above, Oklahoma: 1975-1980	82
A.19	Number and Percent of Inmigrants, Outmigrants and Net Migrants by Industry and Sex,Employed and Experienced Unemployed, Age 16 Years and Over, Oklahoma: 1975-1980	84
A.20	Number and Percent of Inmigrants, Outmigrants and Net Migrants by Income and Sex, Age 15 Years and Above, Oklahoma: 1975-1980	86

EXECUTIVE SUMMARY

This report examines some of the demographic factors affecting population change in the state of Oklahoma. It reviews how the components of population change determined the state's past growth and how they are likely to do so in the future. The report examines the policy implications of the state's expected population growth in the future--to the year 2010. It also looks at the socio-economic characteristics of the people who migrated into the state as well as those who left between 1975 and 1980. The major findings are outlined below.

- Migration, whether primarily outmigration or inmigration, has been the driving force in Oklahoma's past growth patterns.
- Between 1970 and 1980, the large net migration of 241,000 persons accounted for slightly more than one-half of the state's population increase.
- Fertility in Oklahoma is currently below the replacement level of 2.1 and is expected to decline further in the future. This means that without migration the state will eventually begin to lose population as the number of deaths becomes larger than the number of births.
- Oklahoma's population growth will be slower in the future than the fairly rapid growth in the 1970s. Regional and national growth are also expected to slow.
- Oklahoma will grow faster than the rest of the country to the year 2000, increasing by 14 percent from its 1986 population. The state will grow at a pace similar to Arkansas and Louisiana, which will be faster than the slower growth of Kansas and Missouri, but not as fast as the growth of Texas, Colorado and New Mexico.
- Despite the expected addition of nearly 400,000 people to Oklahoma's population by 1990, the state's rank will drop to fifth in the region and twenty-seventh in the nation.

- At a moderate level of migration (15,000 per year), the state will increase to slightly over 4 million people by 2010, an increase of 34 percent. Under high levels of migration (similar to the migration experience of 1975 to 1985 with about 30,000 net migrants per year), the state will grow to nearly 4.6 million; under low migration (5,000 net migrants per year), the state will have 3.7 million people.

- The median age of Oklahomans is projected to increase from 30.1 in 1980 to 36.6 in 2010. Yet even with this substantial increase, Oklahoma will have a younger population than the nation, as the latter is projected to increase from 30.0 to 38.5.

- The potential labor force (ages 18 to 64) will vary depending on the level of migration to the state. Under high migration, the labor force will be 20 percent larger than that expected under the medium migration level. Sixty-four percent of the state's population will be of working age (18 to 64) compared to 50 percent in 1980.

- Because of their work experience, the doubling in size of those in the prime age groups (45 to 54) should improve both the quality and productivity of the workforce between 1980 and 2010.

- The decline in the number of entry level workers (18 to 24) may cause labor shortages for those businesses which rely heavily on young workers. This group will increase only 4 percent from 1980 to 2010.

- The proportion of children aged 0 to 14 will be smaller in 2010 than in 1980. Despite an increase of 12 percent, this group of young children will comprise 19 percent of the population versus 23 percent in 1980.

- Between 1980 and 2000, the elementary school population (5 to 13) will increase by 20 percent. This will require a substantial investment for additional elementary teachers and most likely demand an expansion of school facilities. However, the demand for teachers between 2000 and 2010 will decline slightly along with a 6 percent decrease in the number of students.

- The high school population (aged 14 to 17) is expected to increase only 4 percent from 1980 to 2010. The rate of growth will vary, from its current decline of almost 11 percent between 1980 and 1990, to an increase of 21 percent between 1990 and 2000, and another decline of about 4 percent between 2000 and 2010. The impact on the educational facilities and the fluctuating demand for qualified teachers will be less dramatic than that experienced by the elementary school system.

- Between 1980 and 2010, the traditional college aged population (18 to 24) is expected to increase only 4 percent. This group will also experience a variable rate of growth, declining by 13 percent from 1980 to 1995, then increasing 20 percent between 1995 and 2010. It is unclear what ultimate effect this variation and rather meager overall growth will have on future college enrollment in the state. So far this decade, colleges have been fairly successful in attracting older students; with continued adaptation to the needs of the older students and a rededication to the state's need for a better educated labor force, colleges should be able to at least maintain their current enrollment levels.

- As those persons born during the baby boom begin to reach retirement age around 2010, the social security system may begin to experience severe strains.

- The elderly population--those aged 65 and above--will increase at about the same rate as the rest of the population. The group will grow by 35 percent from roughly 376,000 to over 502,000. However, those aged 75 and above will increase by 52 percent while those 85 and above will increase 112 percent. The demand for increased health care and institutional care for the oldest elderly is expected to expand.

- Males will outnumber females in all age groups with the exception of those aged 64 or over. The age at which females begin to outnumber males will increase from 30 in 1980 to 52 in 2010.

- The changes in the size and composition of a population which were brought about by migration are closely interrelated to changes in the state's economic conditions.

- Between 1975 and 1980, nearly 266,000 Oklahomans left the state, while almost 424,000 persons moved in, leaving a net gain of 158,000 for the state. Ten percent of the state's net migrants were made up of military personnel.

- Although migration did not bring large numbers of affluent individuals to the state, it did bring individuals who were, on the whole, young, relatively well educated and economically active. Thus, Oklahoma appeared to benefit, not only by expanding its labor force with relatively well trained individuals, but also through the general economic stimulation which acompanies population growth.

- Migration between 1975 and 1980 produced no substantial changes in the racial and ethnic composition of the state. With a few small exceptions, the racial and ethnic composition of both inmigrants and outmigrants were quite similar to the state's population.

- Although the people who left the state between 1975 and 1980 were somewhat better educated than those who entered, it should be stressed that a larger portion of the state's net migrants had at least a high school diploma compared to the total population. This represents a significant gain in human capital.

- In terms of attracting educated individuals, Oklahoma was relatively competitive with other states in the region. Kansas and Missouri actually experienced a net loss of persons with four or more years of college while gaining a disproportionate number of persons with less than a high school diploma. Oklahoma also faired better than Arkansas in attracting persons with at least some college and advanced degrees.

- The marital status of both inmigrants and outmigrants closely paralleled that of the total population. More than 60 percent of all migrants were married.

- Oklahoma does not appear to be losing its retirees to the traditional retirement states such as Florida and Arizona. In fact, among those persons of possible retirement age (aged 55 and over) the state actually gained 10,000 persons.

- The state experienced net gains from migration in all occupations as well as all major industrial sectors. While the majority of employed migrants worked in white-collar occupations, proportionately more white-collar workers left the state than came in. The state thus gained more blue-collar workers.
- Those who moved into the state had incomes very similar to the state's population. People who left the state had incomes slightly higher than the state average.

I
Introduction

OBJECTIVES

This report is written to examine the demographic factors affecting population change in the state of Oklahoma. The purposes of the report are as follows:

- To review how the components of population change have affected the state's past growth.
- To examine how these components are likely to affect the state's size and growth in the future.
- To consider the policy implications of the state's future growth, as projected in an earlier report, *Population Projections for the State of Oklahoma, by Age and Sex: 1980 - 2010.*
- To look into the socio-demographic characteristics of the people who moved into the state and those who moved from the state during the period 1975-1980.

This report is also written as partial fulfillment of legislated responsibilities of the Oklahoma State Data Center. As currently mandated, the Data Center is the primary center for applied population research for the State of Oklahoma and the official contact with the U.S. Bureau of the Census. By law, the responsibilities of the Center are:

1. To prepare, maintain and interpret population statistics, estimates and projections including distribution of the state's population (political subdivisions, ethnic and racial population);
2. To cooperate and/or give assistance to other state agencies and organizations in the preparation, maintenance and interpretation of demographic information;
3. To prepare an annual report on the state of the state's population for submission to the Governor and the Legislature with some policy implications of the State's population trends;
4. To provide technical assistance to the Legislature on reapportionment;

5. To assist other divisions and advisory committees of the Oklahoma Department of Commerce by providing them demographic data.

ORGANIZATION OF REPORT

This report consists of five sections in addition to this Introduction. Chapter II provides an overview of the state's growth patterns and expected future growth in comparison to the nation and to states in the region. Chapter III discusses the implications of future changes in the age and sex distribution of the state. It specifically examines projected shifts in the school and college age populations, the working age population and the elderly. Chapter IV presents the characteristics of migrants and their impact on Oklahoma. Chapter V consists of concluding remarks. Finally, the Appendix contains the majority of tables upon which the analyses are based. All footnotes that appear in each chapter are compiled at the end of each chapter in a section called "End Notes."

DATA SOURCES

The primary sources of data for this report are the Oklahoma Department of Commerce population projections for the State of Oklahoma published in January 1987; data from various past censuses conducted by the U.S. Census Bureau; annual population estimates prepared by Census Bureau; population projections published by individual states in the region; and for Kansas, Louisiana and the United States, population projections published in 1983 by the Census Bureau. The migration data are from the special county-to-county migration tape file and the subject report by the Census Bureau, *Geographical Mobility for States and the Nation*.

LIMITATIONS OF THE DATA

In this report we make no attempt to examine county level patterns; the analysis is at the state level only. Later in the year we will publish county level projections that will provide an analysis of county trends.

Expected future trends, as reported here, are based on specific demographic assumptions about fertility, mortality, and migration that may not hold true in the long run. For a review of the assumptions used in projecting the future population of the state, the reader should consult the explanation of methodology in the report, *Population Projections for Oklahoma, by Age and Sex: 1980-2010*. Copies of this report are available from the Department of Commerce.

The migration data discussed in Chapter IV are derived from the 1980 census question on place of residence in 1975. These data do not include information on those under five years of age in 1980 since they were not yet born in 1975. In addition, some of the characteristics of migrants, such as education, occupation, employment and industry, refer to migrant status in 1980 rather than 1975. This makes it impossible to analyze what activities migrants engaged in prior to their relocation, which means we cannot determine the motivating factors of the migration streams. Despite these limitations, these census data are the only source of information on the socioeconomic attributes of Oklahoma migrants.

II

Population Size and Growth: Past and Future

COMPONENTS OF POPULATION CHANGE

Changes in the size of a population, whether an increase or decrease, always occurs as the result of a complex interaction between the two components of population change--natural increase and net migration. Natural increase simply refers to the total number of births in a population minus the total number of deaths. Thus, the greater the absolute difference between the number of live births and the loss of members of the population through death, the greater the natural increase component. Net migration, on the other hand, refers to the number of persons moving into a particular area minus the number of persons who are moving out. The volume of net migration is affected by both "internal" migration--movement from state to state within the nation--and international migration.

It follows then, that population increases can occur as a result of 1) high birth rates and relatively low death rates, 2) a high net migration, or 3) from a combination of high birth and net migration rates. Substantial changes in mortality rates are typically gradual, and are therefore generally slow at bringing population changes. Variations in fertility can proceed with moderate speed; the rates during the baby boom phenomenon moved from average to high fertility in the span of 12 years.[1] The effects of fertility swings tend to be more moderate and spread over a longer period of time. To be sure, there are more or fewer babies to deal with for the short term, but the effects of an increased population on schools and the labor force are delayed. Migration, on the other hand, can change rapidly and can produce very immediate short-term as well as long-term impacts on the labor force, the sale of consumer goods and housing, and the educational system.

Variations in all three rates--fertility, mortality and migration--result from a complex interplay with a variety of social, economic and demographic factors. For example, fertility rates are sensitive to female labor force participation, age at first birth, birth control practices and marriage and divorce rates. Mortality rates, on the other hand, are largely determined by the level of health care, environmental quality and safety as well as general health habits. Finally, factors such as economic growth, employment opportunities and quality of life influence migration patterns.

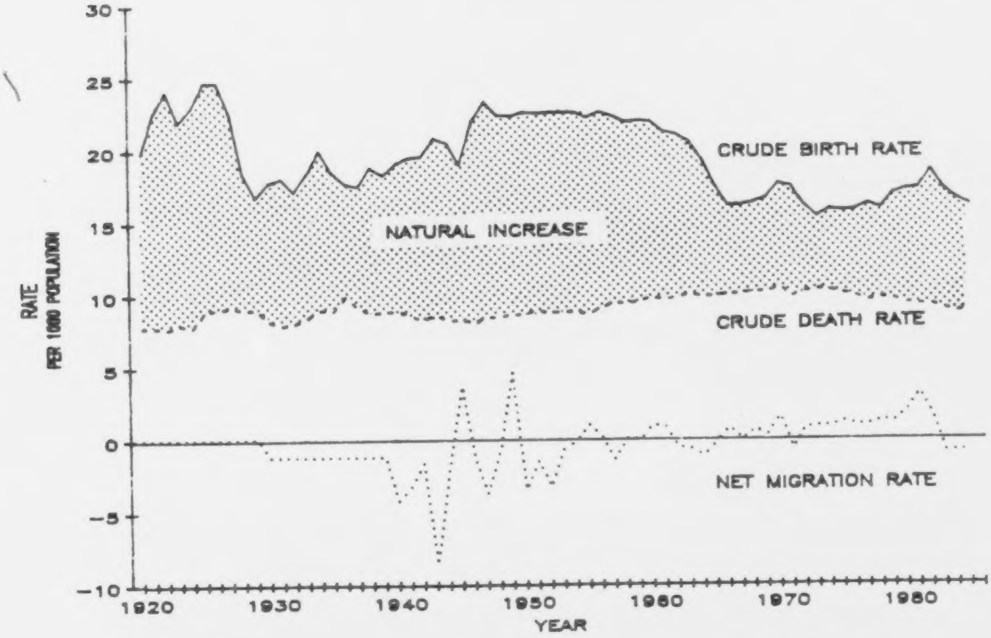
In this chapter we will trace population growth in Oklahoma back to the early 1900s by examining past rates of fertility, mortality and migration in the state. We will also compare Oklahoma's growth over this period to other states in the region--the states surrounding Oklahoma plus Louisiana. We will next present a picture of the state's current growth and projected growth, relying on the state projections by age and sex previously published by the Oklahoma Department of Commerce. In this section, we will look at the future effect on several age groups if high or low migration occurs in the state, rather than medium migration, as assumed in the published projections. Last, we will compare Oklahoma's expected future growth pattern to those projected by the other states in the region.

HISTORY OF POPULATION GROWTH IN OKLAHOMA

Relatively complete documentation of Oklahoma migration patterns exist back to the land runs. This event brought thousands of inmigrants into the state almost overnight. At the same time--although there are no birth or death records available for the state prior to 1920--it is extremely likely that high rates of natural increase also contributed to the state's rapid population growth.[2] Oklahoma's 1890 population of 259,000 tripled in only ten years and then doubled to 1.4 million by statehood. Consequently, the state's ranking as the thirty-ninth most populous state in 1890 jumped to twenty-third by the 1910 census. But it took another sixty-nine years, from statehood to 1976, for the population to double again.

In order to fully understand the process by which population size changes, it is necessary to analyze each population component individually. Figure 2.1 presents birth, death and migration rates over the period 1920 to 1985. Because no annual migration rates are available prior to 1940, the migration component appears flat from 1920-30 and 1930-40. The shaded area between the birth rate and the death rate portrays natural increase, the amount by which the population would grow were there no migration. Examination of the graph shows that the death rate in Oklahoma has remained relatively stable over the 65 year span, while both migration and birth rates have undergone a series of fluctuations. In the 1920s, for example, the high birth rate and very small but positive net migration produced a relatively rapid population gain. By the late twenties, however, birth rates plummeted reaching a low in 1929 of 16.8 births per 1,000 women. Fertility once again rose during the thirties and forties before rapidly accelerating after World War II. In 1947, the birth rate reached 23.3 with nearly 53,000 babies born in that year alone.[3] It was this large natural increase in the decades between 1930 and 1960, that helped offset the large number of persons leaving the state during this period. Between 1930 and 1960, Oklahoma lost nearly 900,000 persons to the dust bowl and its aftermath.[4] In other words, over one-third of the state's population moved away. However, the total population of the state only declined by 689,000 persons, a loss of less than 3 percent.

FIGURE 2.1
COMPONENTS OF POPULATION GROWTH
FOR OKLAHOMA
1920 – 1985



SOURCE: OKLAHOMA HEALTH STATISTICS 1985, OKLAHOMA DEPARTMENT OF HEALTH, 1986; CURRENT POPULATION REPORTS, SERIES P–25.

This was due to the onset of increased fertility in the late 1940s when Oklahoma, along with the rest of the country, entered the now famous "baby boom" period, 1946 to 1964. As Table 2.1 indicates, natural increase was high during the decades of the 1940s and 1950s. Though fertility subsequently dropped in the 1960s and 1970s--reaching a new low of 15.3 in 1973--migration, which displayed a turnaround from three decades of outmigrant flow, remained strong and accounted for more than half of the state's growth (52 percent) in the seventies.

Table 2.1
Components of Population
Change for Oklahoma: 1920-2010

	Net Change (000's)	Natural Increase (000's)	Net Migration (000's)	Change per 1,000 Population in Base Year				Migration as a % of Net Change
				Total Change	Natural Increase	Net Migration	% Change Due to Nat. Increase	
1920-1930	368	294	74	18.1	14.5	3.6	79.9	20.1
1930-1940	- 60	226	- 285	- 2.5	9.4	- 11.9	100.0	0.0
1940-1950	- 103	286	- 388	- 4.4	12.2	- 16.6	100.0	0.0
1950-1960	95	314	- 219	4.3	14.1	- 8.8	100.0	0.0
1960-1970	231	217	13	9.9	9.3	0.9	93.9	5.6
1970-1980	466	173	241	18.2	7.6	11.5	37.1	51.7
1980-1990	394	230	150	13.0	7.6	5.0	58.4	38.1
1990-2000	334	177	150	9.8	5.2	4.4	53.0	44.9
2000-2010	286	135	150	7.6	3.6	4.0	47.2	52.4

Source: Bureau of the Census, *Current Population Survey*, Series P-25, Nos. 911, 927, 944, 957, 970 and unpublished data; Oklahoma State Data Center, *Population Projections for the State of Oklahoma by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, 1987.

Even though fertility dropped in the late sixties and remained low throughout the seventies and early eighties, the largest number of annual births ever recorded in the state--nearly 59,000--occurred in 1982. Births jumped because of the large number of baby boom women entering their childbearing years--the "echo effect." The relatively large number of young adults moving into the state during the seventies and early eighties also acted to increase the number of potential mothers (see Chapter IV). Because the number of young women in the state was so large, even the increased rates of delayed marriage, divorce and childlessness could not impede the increased births.

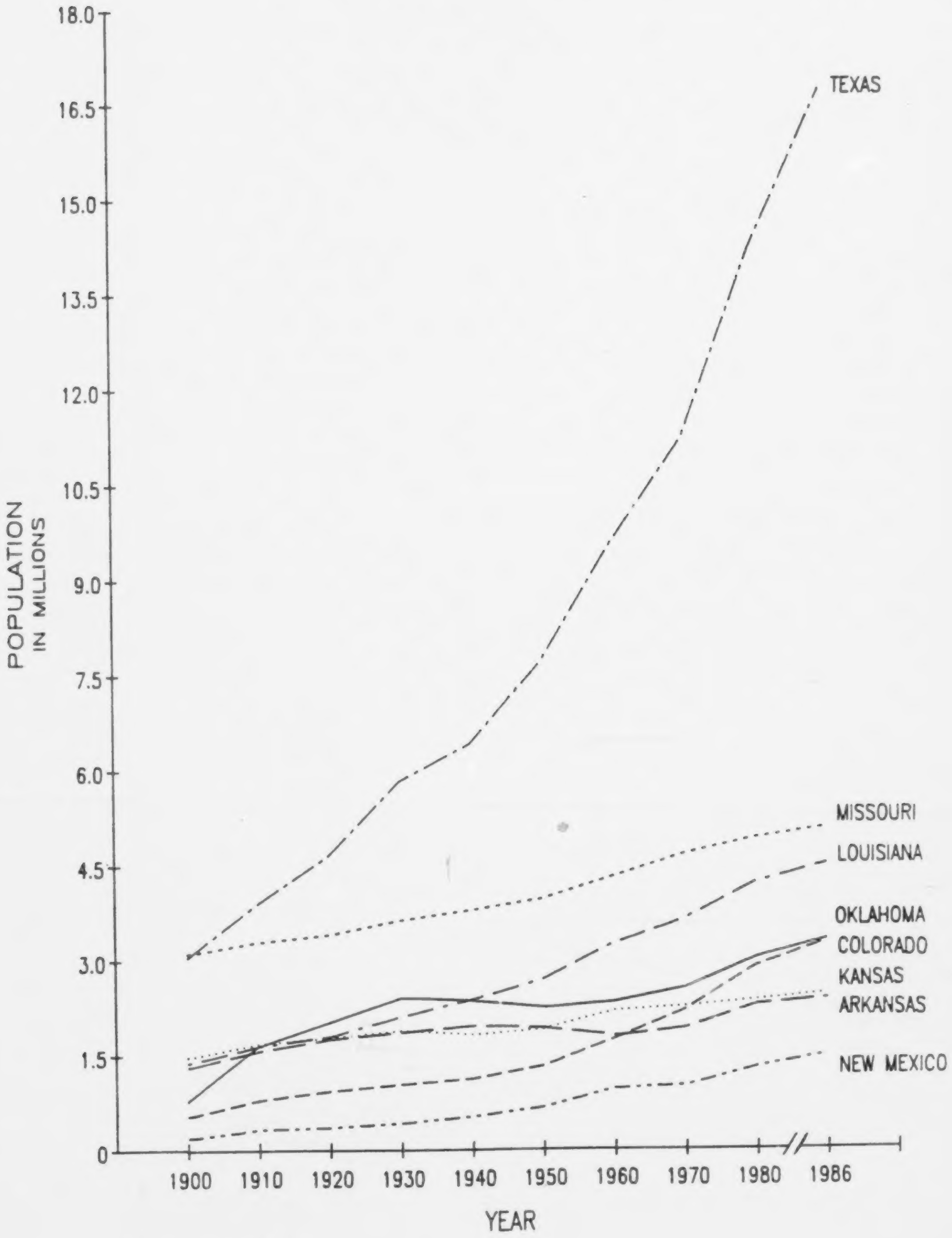
COMPARISON TO OTHER STATES IN THE REGION

During the past sixty years, Oklahoma has grown less than half as fast as the nation.[5] Moreover, state growth rates have been much more erratic than national rates, ranging from a low of −4.4 percent from 1940 to 1950 to a high of 18.2 percent in the decade of the 1970s. Over the same period (1920 to 1980), national rates were lowest, 7.2 percent, during the depression and highest, 18.5 percent, in the 1950s during the height of the baby boom. Prior to 1970, state growth was consistently lower than national, but from 1970 to 1986 (despite recent negative migration), the state growth rate has been consistently higher than national rates.

Since most of the rest of the nation grew faster than Oklahoma in the three decades after 1930, the state's national ranking by population size subsequently dropped from twenty-first to twenty-seventh by 1960. As the state once again experienced the rapid growth characteristic of its early statehood years, its ranking subsequently increased to twenty-sixth (by 1980).

Oklahoma has not been the only state in the region to experience variable growth patterns. As Figure 2.2 shows, Kansas and Arkansas have suffered population losses too, though less prolonged than Oklahoma's. In terms of population size, Oklahoma is ranked fourth among its neighbors as of 1980. Texas, one of the largest states in the nation, completely dominates the region with its enormous population. In fact, its population is approximately the same as that of Oklahoma, Arkansas, Colorado, Kansas and Louisiana combined. As the graph displays, in 1900 Texas had about the same population as Missouri, but grew three times as fast. Missouri and three other states in the region (Louisiana, Colorado and New Mexico) have experienced steady, if unspectacular growth. Leading the region in population growth over the past 86 years is New Mexico with close to an 8 percent average annual growth rate.

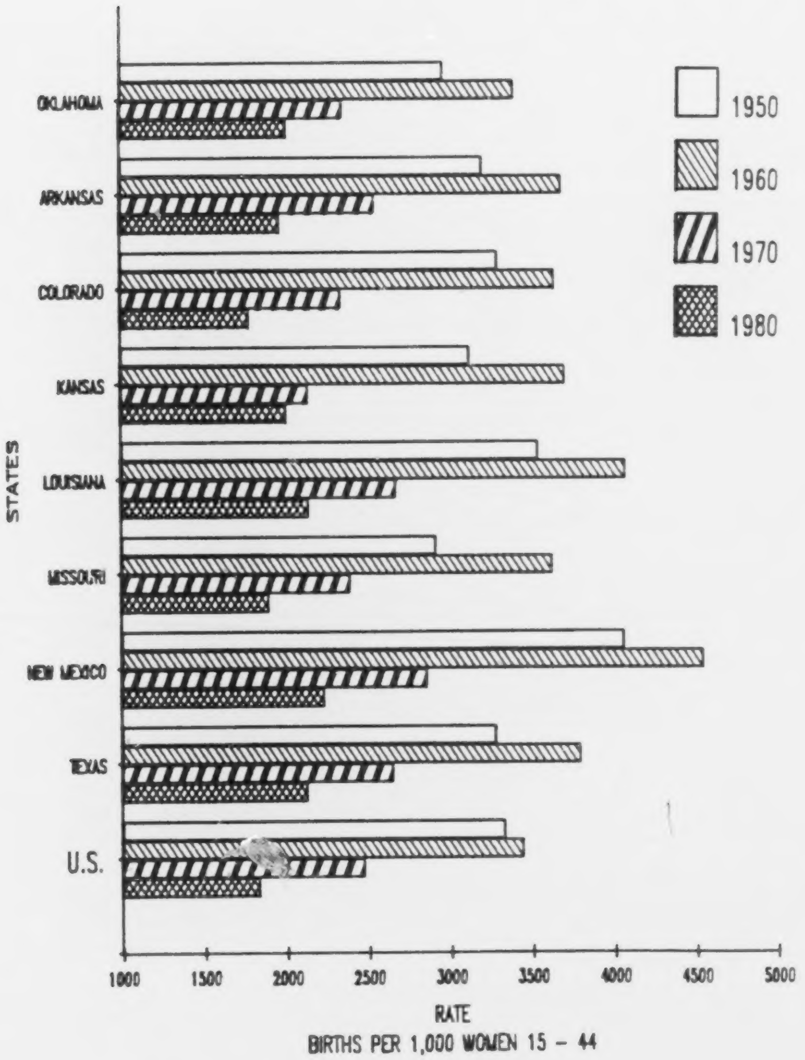
FIGURE 2.2
POPULATION FOR OKLAHOMA AND SELECTED STATES
1900 - 1986



SOURCE: TABLE A.4

Within the region, strong natural increase over the last three decades has caused state populations to grow or has moderated large population losses from outmigration. In all states in the region, natural increase has declined from 1950 to 1980. The reason for this decline is seen in Figure 2.3 which displays both the high fertility of the baby boom and the subsequent fall in fertility in the 1970s and 1980s.

FIGURE 2.3
TOTAL FERTILITY RATES
OKLAHOMA, SELECTED STATES AND U.S.
1950 - 1980



SOURCE: TABLE A.3

Fertility, as measured by the total fertility rate,[6] has been more moderate in Oklahoma than in other states. It neither expanded as fully during the 1960s nor contracted as much in the 1970s and 1980s. While the state's fertility was below that of the country from 1950 to 1970, it was 10 percent above the United States by 1980. All states in the region, with the exception of Colorado, had higher fertility than the United States in 1980.

Oklahoma's 1980 total fertility rate was 2,022, slightly below the replacement level of 2,100 (or as commonly expressed, 2.1 per woman).[7] Still it was higher than United States fertility, which has dropped 41 percent since 1950, from 3.1 to 1.8. Texas, Louisiana and New Mexico have higher fertility than Oklahoma in 1980; all have higher proportions of nonwhites in their populations. Nonwhites have consistently higher fertility than whites. In Oklahoma, American Indians have a crude birth rate 20 percent higher than the White rate, while the Black rate is 45 percent higher.[8] Texas, Louisiana, and New Mexico, in addition to Arkansas, also have high numbers of births to teenagers similar to the rate in Oklahoma.

Migration to the region has increased tremendously from 1950 to 1980. Combined net migration for the eight states for the period 1950 to 1960 was negative. Approximately 546,000 more persons left than came to the region. In the 1960s, this large outflow of migrants had slowed; only 85,000 more persons left than entered the region. A complete turnaround was evident in the 1970s, as the region gained more than 2.5 million migrants. However, even in the seventies, two states, Kansas and Missouri, continued to lose people to migration. Also, 64 percent of the total net migration went to Texas.

Nevertheless, the states in the region surrounding Oklahoma that gained through migration belonged to the South or the West, two regions that benefitted from the propensity of the baby boom to migrate in search of prosperity. In the late 1960s, the oldest of the boom generation was entering the phases of household formation and job market entry. The South and West attracted many of these migrants with their lower cost of living, affordable land and healthier economies. As the baby boom ages and passes out of the younger age groups, which typically form the bulk of the migrant pool, we can expect migration to slow. There are also signs that the younger members of the baby boom (those born after the peak year of 1957) do not have the same proclivity for moving as the older boom cohorts. This alone would have slowed migration to the region, even without the energy-driven recession experienced by many states in the region.

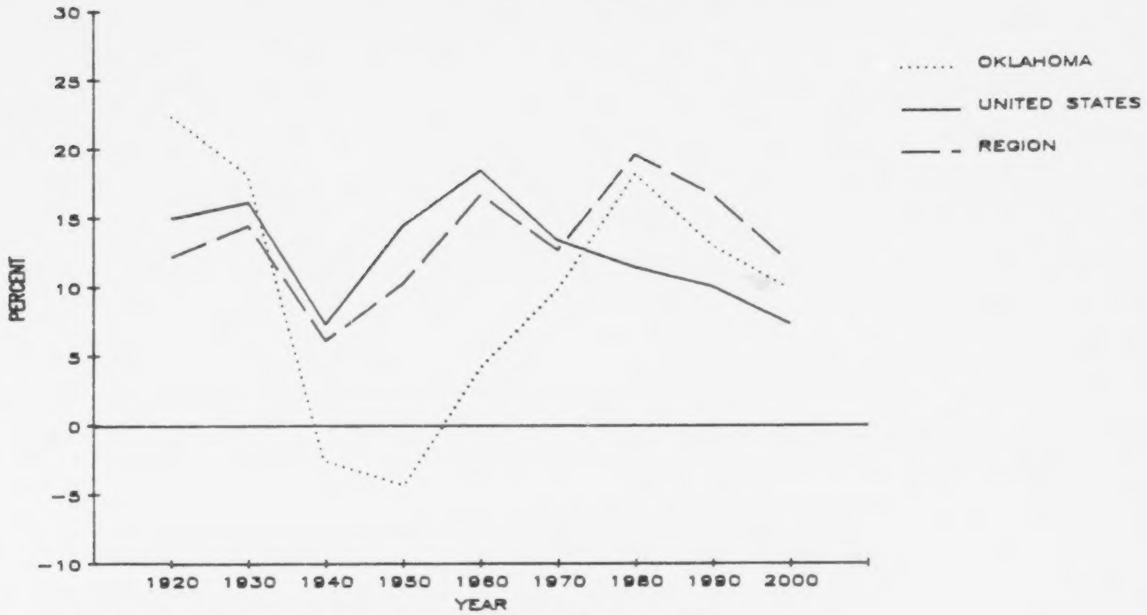
PROJECTED FUTURE GROWTH

By making certain assumptions about future trends in fertility, mortality and migration, we can calculate "population projections"--or predictions of future population size. Because of the evident uncertainties surrounding predictions of future changes in the population components, it is desirable to calculate more than one series of projections. Typically, three sets of projections are calculated under "low," "medium" and "high" assumptions. Under the low assumption, the migration rate is presumed to be lower than recent experience would suggest. Correspondingly, the high migration assumption is made assuming the relatively high rates of 1975-1985 would continue. The Department of Commerce high projections assume a net migration of 30,000 per year, medium of 15,000 and low of 5,000. The advantage to this procedure is that a series of projections presents a reasonable range of future population trends. Thus, one series, typically the projections calculated under the medium assumptions, is designated as the most probable series.

This section discusses future regional growth and compares Oklahoma's projected growth with that of the other states in the region. Next we present an overall picture of Oklahoma's projected population growth under the medium assumption. This is followed by a brief discussion of the alternative scenarios possible under the low and high assumptions. The projections used in this section are not from a single unified projection study. Rather, in lieu of current Census Bureau state projections, we obtained and utilized state-derived projections from most of Oklahoma's neighbors. All of these state generated projections were completed after the recent economic recession and with at least partial recognition of the trouble in the mining sector. For Kansas and Louisiana, however, we were compelled to employ the 1983 Census Bureau projections. Kansas could not provide projections to the year 2000 while Louisiana's projections, prepared during the oil boom, overestimated growth rates and were highly inconsistent with the rest of the states in the region. Since some of the state projections were only through the year 2000, we could compare the states only to that date.

As displayed in Figure 2.4, population growth will slow for Oklahoma, the region and the country in the future. Oklahoma and the region are expected to experience a more rapid decline than the nation, however. Declines will occur because low fertility is expected to continue and migration, for reasons explored previously, is expected to decline.

FIGURE 2.4
PERCENT CHANGE IN POPULATION
OKLAHOMA, UNITED STATES AND THE REGION *
1910 – 2000



* REGION CONSISTS OF CONTIGUOUS STATES PLUS LOUISIANA

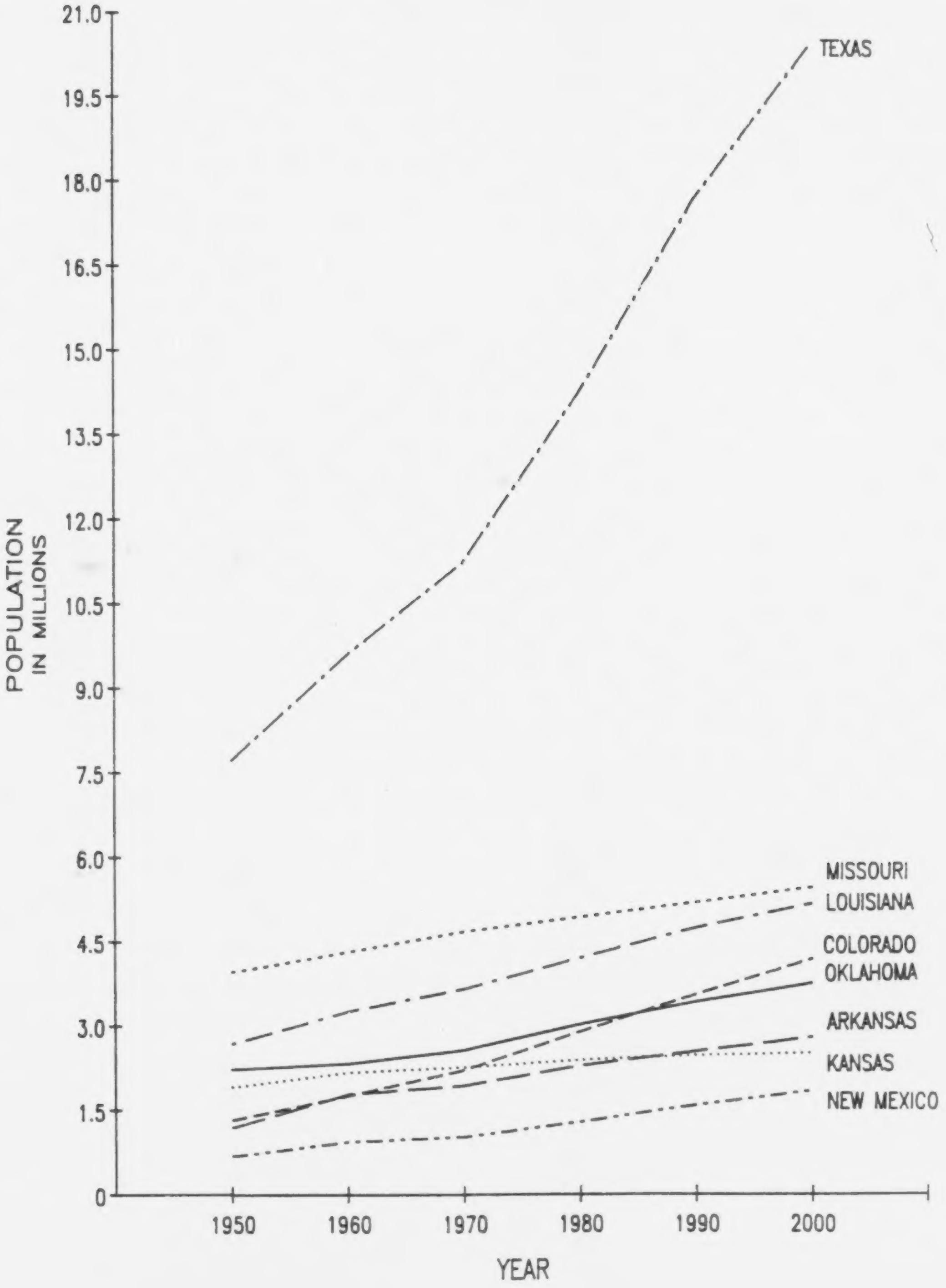
SOURCE: TABLE A.5

Projected Regional Growth

Without exception, all states in the region are expected to grow. As can be seen in Figure 2.5, Texas will remain by far the largest state in the region with over 20 million persons, more than half the total population of the entire eight state region. New Mexico will continue as the smallest state with less than 2 million and, over the next decade and a half, Colorado, Texas and New Mexico will continue as the region's fastest growing states with average annual growth rates significantly higher than Oklahoma's 1.2 percent.

Even though Oklahoma is expected to add three-quarters of a million people to its population by the year 2000, for a population of 3.75 million, it will nevertheless drop in rank to fifth in the region and twenty-seventh in the nation. Oklahoma will be surpassed by Colorado whose population has more than doubled in size since 1920 while Oklahoma, with a 1920 population twice the size of Colorado's, has only increased by 49 percent. Those states that continue to attract more migrants than they lose will grow at a more rapid pace. Those states that fail to attract migrants will, on the other hand, grow at a slower pace unless their natural increase becomes unusually large. Colorado alone has maintained a high rate of migration since 1960, although it too, is expected to drop in the 1990s.

FIGURE 2.5
CENSUS AND PROJECTED POPULATION FOR OKLAHOMA AND SELECTED STATES
1950 - 2000



SOURCE: TABLE A.4

Oklahoma's Present and Future Growth

Although the recent outflow of migrants from the state has led to a small population decline, we do not expect this trend to continue. Our projections show that the average annual net migration rates should be in the 0.4 to 0.5 percent range over the next several decades. Although this is somewhat smaller than the 1.2 percent annual increases characteristic of the 1970s, it nevertheless represents a substantial population gain from migration. We also expect a healthy rate of natural increase throughout the decade of the 1980s with a total of about 230,000 persons during the ten year period. Combined with migration, this will create, by 1990, an addition of nearly 400,000 persons to the state's population, as Table 2.2 reveals. The population will continue to increase following 1990, but at a declining rate. These projections were completed using moderate assumptions about the future.

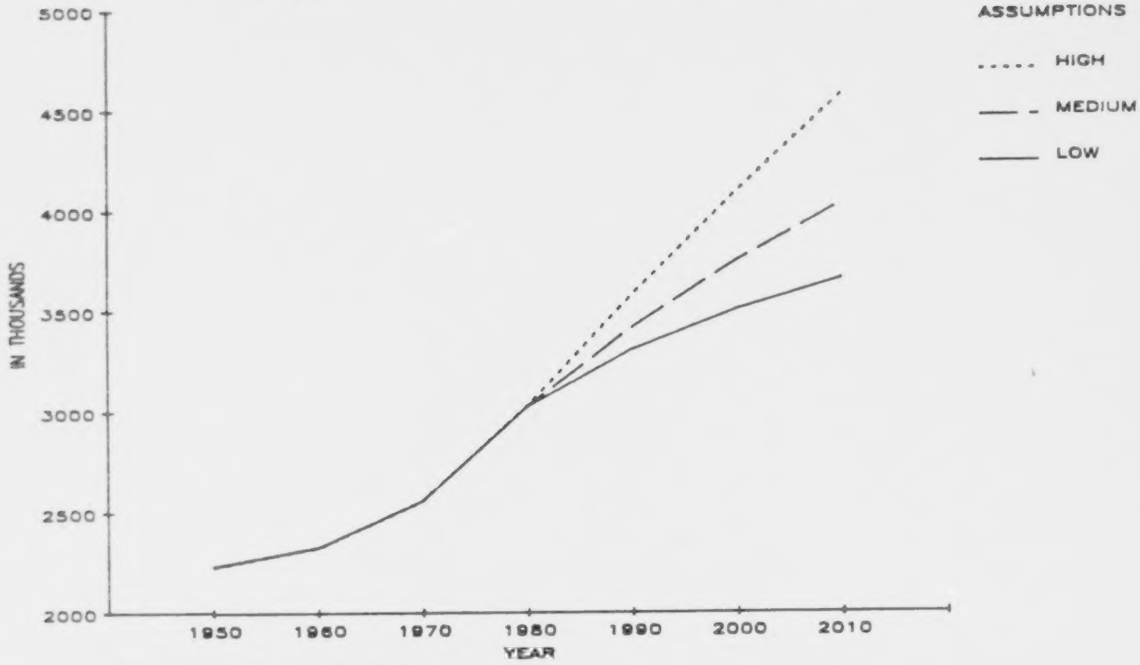
Table 2.2
Projected Population for Oklahoma Under Low, Medium and High Migration Assumptions: 1980-2010
(in 000's)

Migration Assumption	1980	1985	1990	1995	2000	2005	2010
Low	3,025	3,181	3,310	3,418	3,510	3,588	3,664
% Increase	--	5.2	4.1	3.3	2.7	2.2	2.1
Medium	3,025	3,234	3,419	3,594	3,753	3,896	4,040
% Increase	--	6.9	5.7	5.1	4.4	3.8	3.7
High	3,025	3,312	3,583	3,843	4,095	4,337	4,581
% Increase	--	9.5	8.2	7.3	6.6	5.9	5.6

Source: Oklahoma State Data Center, *Population Projections for the State of Oklahoma by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, 1987.

Figure 2.6 shows Oklahoma's total projected growth under three different migration assumptions. Although some demographers prepare projections changing fertility and mortality rates as well, our projections assume that these two rates will remain relatively stable through 2010.[9] Under the medium assumption, we expect the state to maintain a moderate level of net migration--approximately 15,000 per year--but since fewer young adults and young families are expected to enter the state, the rate of natural increase is expected to decline. Thus, Oklahoma's total population should reach approximately 4,039,600 by the year 2010. If on the other hand, net migration falls to a lower level than currently anticipated, Oklahoma's population may reach only 3,664,000, an increase of 21 percent. Finally, if Oklahoma experiences an unusually large net migration--similar to that occurring in the early eighties--the state's population will expand by 51 percent, exceeding 4,580,000.

FIGURE 2.6
PROJECTED POPULATION UNDER THREE MIGRATION ASSUMPTIONS FOR OKLAHOMA: 1950 TO 2010

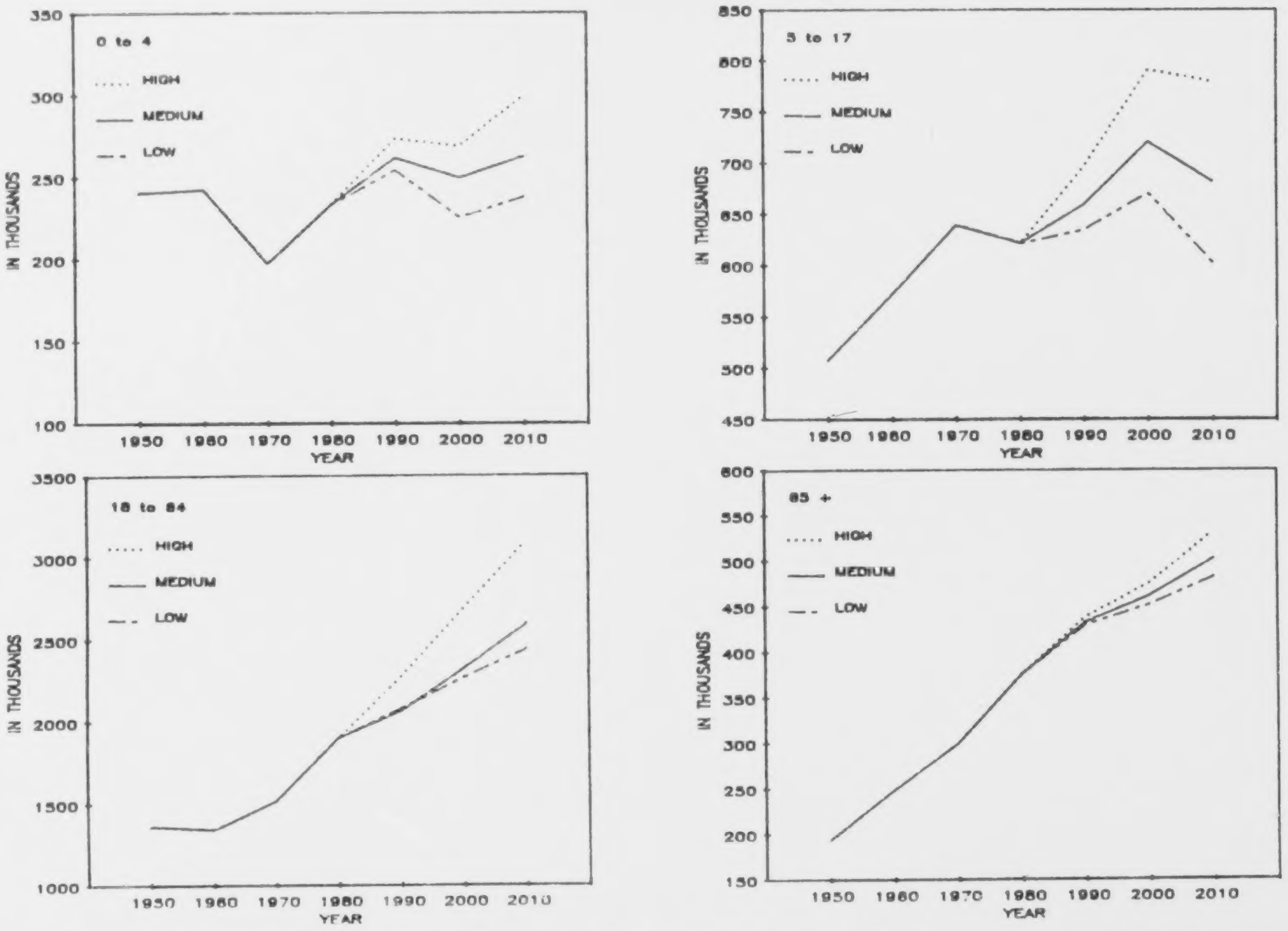


SOURCE: OKLAHOMA STATE DATA CENTER

The potential range of migration patterns also affects our predictions of Oklahoma's age structure. Figure 2.7 presents projections of the number of persons within four different age groups--0 to 4, 5 to 17, 18 to 64 and 65 and older--under three sets of migration assumptions. According to our projections, the age group 18 to 64--which approximates the working age population--is perhaps most sensitive to variations in migration. Examination of the graph shows that, under the medium migration assumption, there will be over 2.5 million in the potential labor force. Under the high migration assumption, however, we expect over 3 million persons which represents a significant difference.

The variation in the future number of persons aged 0 to 4 and 5 to 17 is, of course, dependent upon the migration patterns of their parents. For example, if more young families move into the state than anticipated, the number of children would naturally be higher than our medium projection of nearly 700,000. With high migration, the number of school age children will increase twice as fast than with medium migration.

FIGURE 2.7
PROJECTED POPULATION BY AGE UNDER THREE MIGRATION ASSUMPTIONS FOR OKLAHOMA: 1950 – 2010



SOURCE: OKLAHOMA STATE DATA CENTER, POPULATION PROJECTIONS FOR THE STATE OF OKLAHOMA, BY AGE AND SEX: 1980 – 2010

Finally the number of elderly persons--65 years and older--in the year 2010 will depend upon the volume of migration and mortality rates. Although the projections for this age group under all three assumptions appear quite similar, the differences carry profound implications for the state. Requirements for elderly residential and institutional care, for example, is sensitive to even small changes in the number of elderly. Since migration is so dependent on the health of the state's economy as well as the amount and type of economic competition among the states, it is difficult to determine the exact amount of future migration. At present, however, the medium assumptions seem most reasonable. The remaining chapters of this report will more fully detail the social and economic implications of these projections.

End Notes

[1] The United States' total fertility rate in 1944 was 2.5 per woman of childbearing age; by 1957, the height of the baby boom, the rate was 3.8 children per woman.

[2] Assuming that birth rates of Oklahomans were similar to those of the United States. In the early 1900s, the United State's crude birth rate (number of annual births per 1,000 population) was close to 30.0, significantly higher than the 25.3 at the height of the baby boom.

[3] With a population 32 percent smaller, the 1947 population produced as many births as the 1985 population.

[4] Although the drought and subsequent dust storms that tormented parts of Oklahoma (particularly the panhandle) are blamed for the exodus of people from the state, it was the depressed cotton industry that caused many cotton-tenant farmers of the Southeastern counties to leave the state. They were the "Okies" who received so much national attention. Furthermore, the floods that followed the droughts displaced more Oklahomans than the drought and dust. Oklahomans, wherever they settled, sought independence and self-sufficiency. See H. Wayne Morgan and Anne Hodges Morgan, *Oklahoma: A Bicentenial History*, W.W. Norton & Co., New York, 1977, pp. 160-170.

[5] See Table A.5 in the Appendix.

6 The total fertility rate measures how many children 1,000 women would bear if their lifetime of childbearing was the same as that prevailing during the period of observation (i.e., a particular year).

7 Replacement level represents the number of births per all women of childbearing age that are necessary to merely replace the current population. Each female must replace herself with another female to assure that another generation will be born. Because more males are born than females and not all females survive to bear children, the average number of births must be 2.1 to ensure that at least one female will be born to replace each woman in the population.

8 Oklahoma State Data Center, *Demographic State of the State*, 1984, p. 12.

9 Fertility is assumed to remain at its 1979-1981 level to the year 1999 and then decline by 5.5 percent. The total fertility rate will thus start at 1.99 children per woman of childbearing age and then drop to 1.88 children per woman. The projections also assume that life expectancy will improve during the current decade as well as during the 1990s. According to the mortality assumptions, the expectation of life at birth will increase from 69.6 years to 70.9 years for males and 77.8 years to 79.6 years for females between 1980 and 2010.

III
Demographic Composition and Policy Implications

INTRODUCTION

The relationship between the demographic composition of a population and its social, economic and political conditions is well documented in the social science literature. A large body of research shows that changes in the composition of a population--whether in the age, sex or race structure[1]--can carry profound implications for socioeconomic and political change. One particularly striking example of this relationship is the unusually high fertility rates which occurred during the famous "baby boom" between 1946 and 1964. During this period, fully one third of the present U.S. population, or some 74 million Americans, were born. The changes which came about in the U.S. age structure as a result of the baby boom subsequently affected a number of social and economic institutions and will continue to do so for a number of years to come.

Given this relationship, the recognition of current demographic characteristics as well as future trends becomes a vital first step in formulating solutions to the problems faced by governments, private agencies, businesses and community organizations. Although demographic analysis cannot, in itself, lead directly to policy decisions, it can help broaden the understanding of social and economic conditions and thereby lead to more informed and effective policies by governmental leaders and other policy makers.

This chapter then, has two major objectives. One is to describe the demographic composition of Oklahoma's population in 1980 and discuss the compositional changes we project will occur by the year 2010. This discussion will focus on the state's age and sex structure. The second objective is to point out in some detail the implications these changes carry for the social, economic and political climate of the state.

The major source of data for this section is *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010* published by the Oklahoma

Department of Commerce in January, 1987.[2] Information was also obtained from a variety of U.S. Census Bureau reports.

AGE COMPOSITION

The Components of Age Composition

The age composition of a population is of primary importance in many types of planning, particularly estimations of school enrollment, health care delivery, labor force and potential voter participation. Moreover, the age structure is crucial in relation to a variety of social and economic variables since the latter tend to vary greatly according to age. For example, age has a fundamental effect on subjective attitudes and beliefs as well as on objective characteristics such as income, occupation and group membership. In this section, we outline what proportion of Oklahoma's total population is in each age cohort, how these proportions are expected to change over the next thirty years, what factors are responsible for this change and what impact these changes are likely to have.

To understand how a population has arrived at its present age structure or to project what future changes may occur, requires an analysis of the three components of population change--fertility, mortality and migration. To begin with, changing fertility rates over time produce different age group or "cohort" sizes. A sudden rise in the number of births, for example, increases the proportion of young persons in the population and can thereby change the age structure. On the other hand, a sudden drop in the fertility rate reduces the proportion of young persons in the population and consequently causes the age structure to shift upward.

The life expectancy of individuals can also affect a population's age composition. If, on the average, individuals in a population enjoy a long life, they survive to move into other age groups and thereby increase the proportion of older persons in the population. If, on the other hand, the life expectancy within a population is generally low--such as in developing nations--fewer individuals survive to the older age groups leaving a small proportion of elderly.

Finally, an individual who migrates has the effect of subtracting one individual from his age group in one location and adding one to his age group in another location. Since people who migrate are typically young, a large migration can rapidly increase a population's proportion of young people. In short, both immediate and long term fluctuations in fertility, mortality and migration rates are reflected in the age composition of a population.

Oklahoma's Age Composition

The population of Oklahoma, like many other states in the nation, is aging as measured by the median age. Median age is a statistical measure which refers to the age at which half of the population is younger and half is older. The median age for Oklahomans, which was 30.1 in 1980, is projected to increase to 36.6 years by 2010, as shown in Table 3.1. Yet even with this substantial increase, Oklahoma will have a younger population than the total U.S. population as the latter is projected to increase from 30.0 to 38.5 years.

Table 3.1
Median Age of Population, United States and Oklahoma: 1980-2010

	Census	Projections		
	1980	1990	2000	2010
United States	30.0	33.0	36.3	38.5
Oklahoma	30.1	32.3	34.9	36.6

Source: Bureau of the Census, Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*, U.S. Government Printing Office, Washington, D.C., 1984; Oklahoma State Data Center, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, Oklahoma City, 1987.

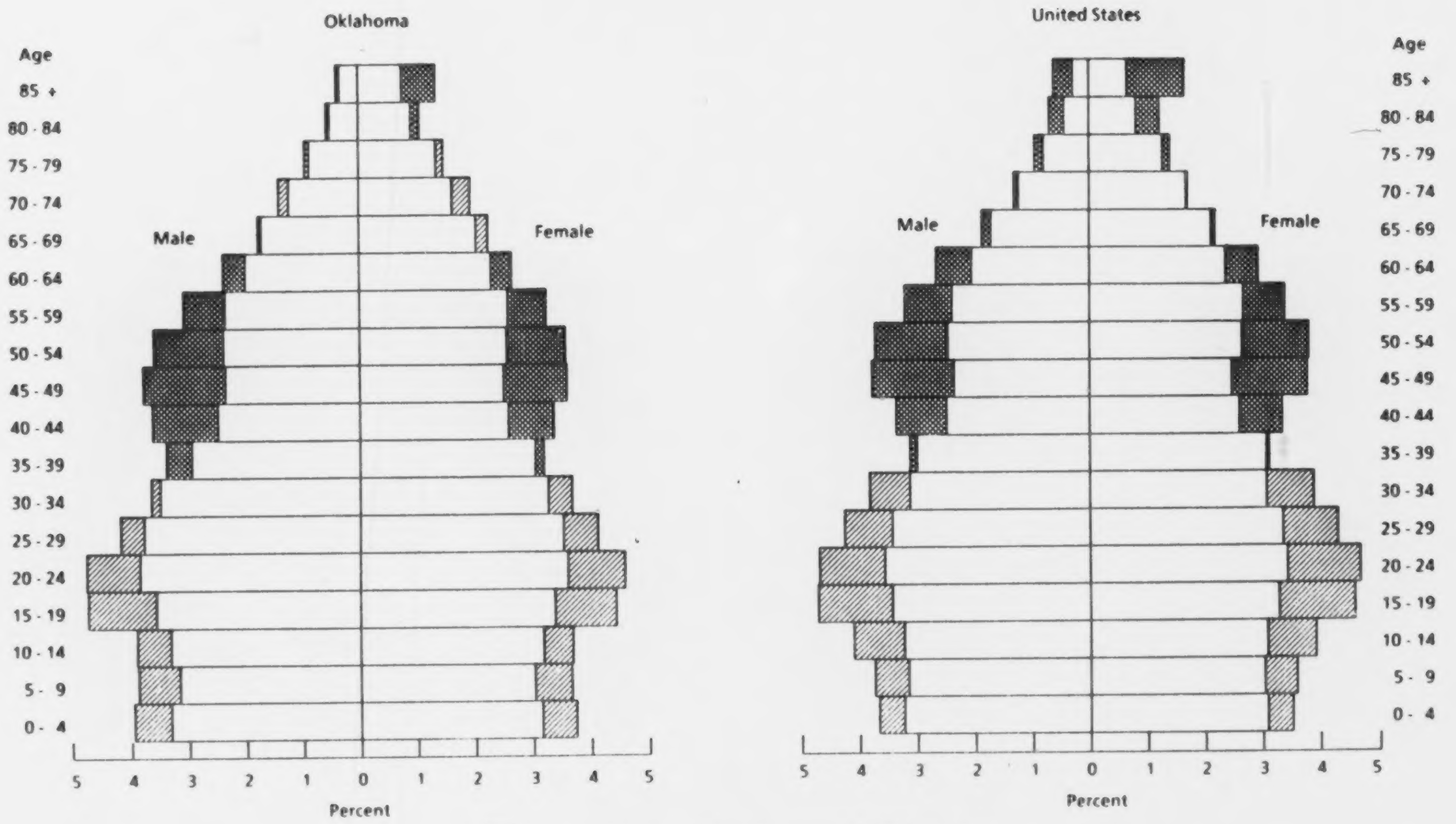
The state's population is aging as a result of a combination of two factors. The fertility rate in Oklahoma has been declining since the late 1960s. In other words, the "average" woman of today is having fewer babies than the average woman used to. As the number of children being born decreases, the proportion of older persons in the population increases. Secondly, with the eldest of the individuals born during the baby boom now entering their forties, the sheer number of people in this cohort results in a higher median age.

One way to graphically represent the age structure of a population is by a population pyramid like the one shown in Figure 3.1. The pyramid consists of stacked bars with each bar representing the number of males and females born within a particular period. Males are shown on the left side while females appear on the right. A scale at the bottom of the pyramid shows the proportion of males and females. Typically, the youngest age groups have the largest bars and they become smaller as age increases. Figure 3.1 superimposes the 2010 population pyramid on the 1980 population pyramids for Oklahoma and the United States. The striped boxes represent the amount by which the 1980 percentage in a particular age cohort exceeds the 2010 percentage for the same age cohort. The cross-hatched boxes indicate the amount by which the 2010 percentage exceeds the 1980 percentage for a particular age cohort.

Examination of the pyramids shows several important changes occurring in the age structure over the next 30 years. To begin with, the proportion of young people in Oklahoma (0 to 14) will be smaller in 2010 than in 1980. This proportional change comes about as a result of the "baby bust" years of the 1970s when fertility declined in Oklahoma as well as nationally.

Secondly, those in the age cohorts 0-4 through 30-34 occupy a greater proportion of the pyramid in 1980 than the projected proportion in 2010. The cohorts aged 15-34 belong to the baby boom period (1946-1964) when fertility rates reached such high levels. But by the year 2010, members of the older cohorts will have moved into the age group 45 to 64 and thereby increased the proportion of this age group in the population. In addition, the population in 2010 will have a smaller percentage under the age 35 than was the case in 1980. This results from the combination of the low fertility rates since the closing of the baby boom as well as the aging of the baby boomers themselves. Finally, the percentage of persons beyond the age of 84 will be 50 percent higher in 2010 than in 1980.

FIGURE 3.1
AGE-SEX PYRAMIDS FOR
OKLAHOMA AND THE UNITED STATES: 1980 AND 2010



▨ Amount by which the 1980 percentage exceeds the 2010 percentage

▩ Amount by which the 2010 percentage exceeds the 1980 percentage

SOURCE: Tables A 6 and A 7

If we compare the United States population pyramid with Oklahoma's, we find that proportionately, Oklahoma will have a larger young population and a smaller elderly population than the nation by the year 2010. The U.S. population in 2010 will also contain a higher proportion of those aged 45 and above.

Policy Implications of a Changing Age Structure

Any significant change in the age structure of a population can be expected to produce changes in a variety of social and economic institutions. These changes can range from shifts in consumer behavior patterns to alterations in the manpower available to the labor force. The remainder of this section will point out some of the social and economic implications which stem from changes in Oklahoma's age structure.

Labor Force

Perhaps one of the most important consequences of the coming shift in Oklahoma's age structure will have to do with changes in the labor market. Changes in the size of the labor force can be estimated using projections of the working age population--those aged 18 to 64. Of course, not everyone within this range is actually working. Labor force participation rates are highest for males aged 25 to 54 years of age, while significantly lower for males outside this range and for females. Therefore, projections of the working age population are only an indication of the future size of the labor force.

As the baby boom cohort aged, each successive cohort of workers entering the labor force increased the demand on the labor market to expand. Table 3.2 shows that the working age population is projected to expand to over 2.6 million in 2010, an increase of 45 percent. In other words, a larger proportion of the state's population will be of working age in 2010 than in 1980, 64 versus 50 percent. However, the increase will not be equally distributed across the age cohorts. The most dramatic increase will occur in the age group 45 to 54 which is expected to increase by almost 98 percent. The proportion of the population aged 35 to 44 and 55 to 64 are both expected to grow by 64 percent.

Table 3.2
Number and Percent of Working Age Population, Age 18 to 64 Years, United States and Oklahoma: 1980-2010

	Census		Projections					
	1980		1990		2000		2010	
	No.	%	No.	%	No.	%	No.	%
United States	137,241,000	60.6	153,622,000	61.5	165,165,000	61.6	179,199,000	63.3
Oklahoma	1,794,300	59.3	2,065,000	60.3	2,321,800	61.9	2,593,200	64.2

Source: Bureau of the Census, Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*, U.S. Government Printing Office, Washington, D.C., 1984; Oklahoma State Data Center, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, Oklahoma City, 1987.

These shifts have important ramifications for employment and retirement prospects. Because of their years of work experience, the increase of those in the prime age groups (45 to 54) should both improve the quality of the state's labor force and heighten productivity. However, because of their large numbers, they may find that there will not be enough suitable jobs to go around. Moreover, they can also expect stiff competition in career advancement. That is, turnover in the higher positions will lessen, thereby making advancement a longer and more difficult process.

Of equal importance is the impact of an aging population on the social security system. At present, the number of people in the labor force exceeds the number of those receiving social security benefits. But when the baby boom reaches retirement age (beginning in 2010), the demands on the social security system may produce severe strains between this larger cohort and the younger--and less numerous--workers who must finance the system. In other words, the retired baby boom cohorts will be dependent upon much smaller cohorts to keep the social security system solvent--a task to which the younger cohorts may not feel obligated as social security taxes would have to rise dramatically.

Although the aging of the state's labor force may create employment difficulties for the baby boomers, the situation should benefit younger workers. The proportion of younger workers--those born during the "baby bust"--will comprise a steadily declining share of the total working age population. Those in the entry level working group--18 to 24 years old--are projected to have the slowest growth rate, increasing by only 4 percent from 1980 to 2010. In absolute terms, the 18-24 year old group will only increase by 16,000 from its 1980 size. At present, this group comprises 22 percent of all 18 to 64 year olds but will account for only 16 percent in 2010. This overall decrease, however, will not be smooth over the next three decades. Between 1980 and 1990, this group will decline by 11 percent before again rising by about 5 percent during the 1990s and 11 percent between 2000 and 2010. The population aged 25 to 34 will also grow at a declining rate. Projections show a 23 percent increase in this age group during the 1980s, but only about 9 percent between 1990 and 2000 and 7 percent between 2000 and 2010.

There is considerable disagreement as to the ultimate impact the decline of young workers will have on the labor force. On the one hand, many experts believe there will be a severe labor shortage of entry level workers, particularly in the near future. The decline in growth rates for these cohorts will no doubt mean fewer people competing for the available jobs. In fact, employers who are accustomed to an abundance of workers eager for any kind of work, may find themselves competing for the smaller number of workers by increasing salaries and wages and offering improved benefits. If there is indeed a shortage, the businesses most likely to be hurt will be those who have traditionally relied on young, low wage workers such as the service industries.

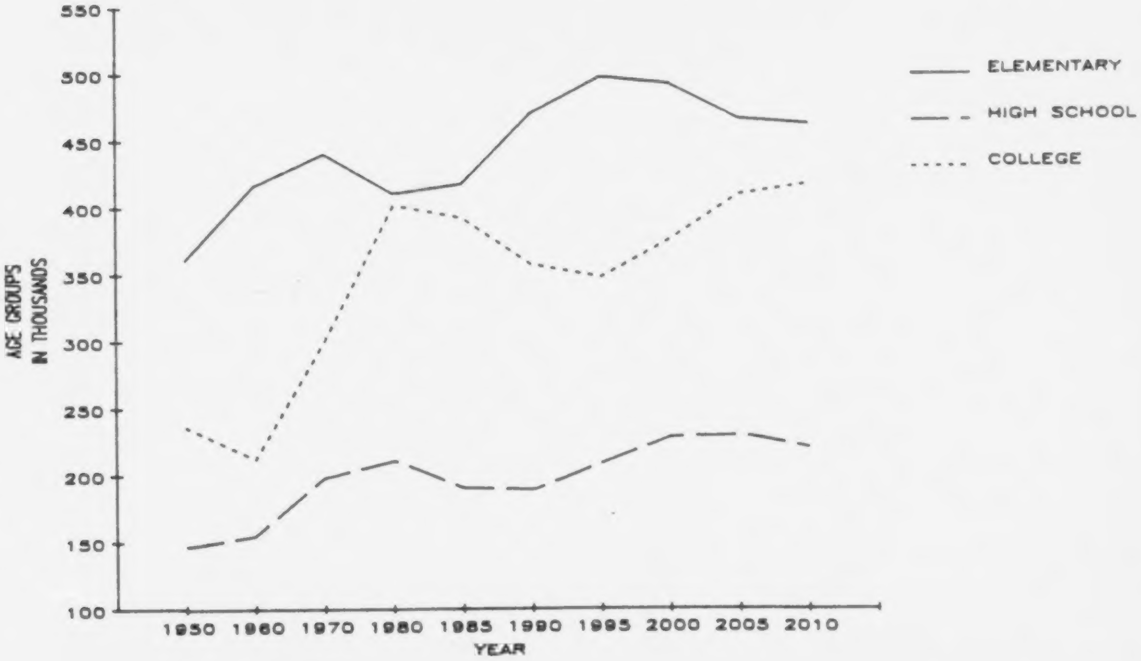
Others believe, however, that a number of intervening factors will offset the decline in the entry level population. For example, advances in technology and automation may reduce the number of workers necessary to perform some tasks. Moreover, the entry of women into the labor force may accelerate and thereby help to avert any shortage. Finally, increases in the typical retirement age along with inmigration from outside national borders may also contribute manpower to the labor force.

School and College Enrollment

Typically, the first institution to feel the impact of a changing age structure is the educational system. As members of the baby boom cohort reached school age, educational facilities were strained to provide adequate space for the huge number of new students. Between 1950 and 1970 alone, the 26 percent increase in the number of school aged children in the state crowded classrooms, created a shortage of teachers and outdated existing facilities. As a result, secondary, and later some upper level schools, were forced to expand both in physical size and in the number of faculty. But as the baby boomers moved out of the system and fertility rates declined, the demand on the educational system began to lessen. School enrollments dropped, causing cutbacks in the number of teachers as well as curtailment of some programs and school closings.

Our projections, however, show that there will be a reversal in this trend as the number of school-aged children (5-17) is expected to rise (see Figure 3.2). The elementary school population--aged 5 to 13--will grow from about 411,000 in 1980 to about 462,000 in 2010, a growth of 12 percent. However, this overall growth rate fluctuates substantially over the three decades. Between 1980 and 1995, this age group will increase by 21 percent, then decline 1 percent between 1995 and 2000. Between 2000 and 2010, this age group will decline an additional 6 percent. This reflects the movement of the youngest of the large group of baby boom females out of the most productive child bearing ages, 20 to 24.

FIGURE 3.2
ELEMENTARY, HIGH SCHOOL, AND COLLEGE AGE POPULATION
OKLAHOMA: 1950 — 2010



SOURCE: TABLE A.9

The impact of this overall increase on Oklahoma's elementary school system will vary over the next thirty years. The 20 percent increase of the elementary population between 1980 and 2000 will require a substantial increase in elementary teachers and probably demand an expansion of school facilities. As shown in Figure 3.2, the impact on the school system will be nearly as large as that during the 1950s and 1960s and will be longer lasting. The 6 percent decline in the size of this population between 2000 and 2010 will have an opposing effect. Once again, the demand for teachers will decrease along with the decline in students. On the positive side, however, we could expect an improvement in the student-teacher ratio if teachers are not laid off. Moreover, the total dollar amount spent by the state on education could decrease slightly without any corresponding decrease in the quality of education.

The high school population--aged 14 to 17--is also expected to increase over the next three decades but only slightly (4 percent). The 1980 figure of 211,000 is expected to rise to a 2010 total of 220,000. Again, the rate of growth will fluctuate during these years--declining almost 11 percent between 1980 and 1990, then increasing 21 percent between 1990 and 2000, before again declining about 4 percent between 2000 and 2010. The impact on educational facilities and the fluctuating demand for qualified instructors should be similar to that facing the elementary system, but will occur at different times. In the 1980s, while the elementary population is expanding rapidly, the high school aged population will decline. The large growth in the elementary group will fuel a large gain in the high school population in the 1990s. Both will decline from 2000 to 2010 but will remain larger than their 1980 size, particularly the 5 to 13 year old group.

Although many factors are involved in the decision to attend college (such as tuition costs, family income and employment prospects) and it is unknown how much the rate of attendance by older persons will increase, the size of the traditional college-age population (18-24) can provide a good indication of higher education enrollment. The college age population is projected to increase from about 402,000 persons in 1980 to almost 418,000 in 2010, an increase of just 4 percent. In between these thirty years, this population will decline by 11 percent between 1980 and 1990, increase by about 5 percent over the following decade and increase another 11 percent between 2000 and 2010. It is unclear what effect this variable growth and rather meager overall growth will have on future college enrollment in the state. So far this decade, colleges have been fairly successful in attracting older students; with continued adaptation to the needs of the older student and attention to the state's need for a better educated labor force, colleges should be able to at least maintain their current enrollments. During the late 1990s, the college age population will grow larger but won't reach its 1980 size until nearly 2005.

Crime

The age structure also has a direct effect on the amount of crime in Oklahoma. Since 45 percent of all arrests are of teenagers and young adults 15 to 25 years of age, the proportion of the population in this age group is important in predicting crime rates and prison populations.[3] For instance, 62 percent of all persons arrested for burglary in 1985 and 67 percent of those arrested for auto theft were between the ages of 15 and 25. Consequently, as the baby boom moved into their late teens and early twenties in the 1960s and 1970s, crime increased dramatically, overburdening the criminal justice system and contributing to prison overcrowding. In contrast, by 1995 there will be 60,000 fewer persons aged 15-25 than in 1980 and this age group's proportion of the total population will drop from 19 to 14 percent. Although this group will subsequently add 80,000 persons by 2010, its proportion will remain around the 14 percent level. As the proportion of the population between 15 and 25 decreases in the future, there is every reason to expect that the crime rate of those crimes typically committed by young people and teenagers will also decline. Subsequently, the pressure on the courts, juvenile detention centers and prisons should also be reduced.

Oklahoma's Elderly

One truly revolutionary change in store for Oklahoma's age structure--and one that carries profound implications--is the dramatic rise in the number of elderly. Increases in longevity in conjunction with declines in fertility will demand that certain priorities be shifted towards the welfare of the elderly. Governmental leaders and policy makers will be forced to pay increasing attention to the need for hospital and nursing home care, retirement housing, recreation, rehabilitation and adequate in-home support services for the elderly.

Table 3.3
Number and Percent of the Elderly Population
Oklahoma and United States: 1980-2010

	Census		Projections					
	1980		1990		2000		2010	
	No.	%	No.	%	No.	%	No.	%
Oklahoma								
65 +	376,100	12.4	433,000	12.7	461,500	12.3	502,500	12.4
85 +	34,000	1.1	48,400	1.4	63,900	1.7	72,000	1.8
United States								
65 +	25,730,000	11.3	31,706,000	12.7	34,834,000	13.0	39,086,000	13.8
85 +	2,240,000	1.0	3,313,000	1.3	4,926,000	1.8	6,551,000	2.3

Source: Bureau of the Census, Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*, U.S. Government Printing Office, Washington, D.C., 1984; Oklahoma State Data Center, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, Oklahoma City, 1987.

Oklahoma's elderly population is expected to grow faster than the rest of the population. Table 3.3 shows that between 1980 and 2010, the elderly population--those aged 65 and over--will increase 35 percent from roughly 376,000 to over 502,000. However, those aged 75 and above will increase by 52 percent while the oldest old--those aged 85 and above--will increase by 112 percent. The corresponding increases nationwide will be even greater, with those 75 and above growing 89 percent and those over 85 growing by 192 percent.

As the elderly population continues to grow over the coming decades, more and more pressure will be placed upon health care facilities to provide adequate care. Persons living past 65 are much more likely to face a succession of illnesses which will require medical attention and often hospitalization and home care. This could become especially critical in the next century (after 2020) when the large number of baby boomers move into the over 75 age bracket. In fact, if the elderly continue health care use at the present rate, it could actually place strains on the state's economy. To control costs of health care services provided to the elderly, the system by which the health care is financed and delivered will have to be reevaluated.

A related, but potentially more serious problem, is the probable increase in the number of elderly who are disabled and require residential or institutionalized care. Of course, the ultimate number who will require institutional care depends on a number of factors. But if we assume that current living arrangement patterns and income levels for this group persist to the year 2010, increased stress on long-term care facilities can be expected. Finally, since women tend to live about seven years longer than men, many elderly women can expect to spend a number of years at the end of their life without a spouse and without adequate resources. In 1980 for example, nearly 85 percent of women aged 85 or over lived alone compared to 34 percent of men aged 85 or over. The elderly woman (65 years and older) living alone had the lowest median income of all elderly, only $3,937 according to the 1980 Census. Consequently, both state and federal governments can probably expect increases in the amount of money needed through transfer payments and various services to assist the elderly.

One way to measure the level of economic dependency in a population is through the dependency ratio. The dependency ratio is a general indicator of the proportion of the population which is generally considered to be economically unproductive. Typically, persons under eighteen are young dependents while those over sixty-five are elderly dependents. Of course, not all persons under eighteen or over sixty-five are economically dependent nor are all persons between 18 and 64 economically productive. Nevertheless, the dependency ratio does provide a general and useful indication of economic dependency.

As shown in Table 3.4, there will be a larger base of working persons in Oklahoma to support both the elderly and children under 18 by 2010. The 1980 dependency ratio, 69 dependents per 100 persons of labor force age, is expected to gradually decline over the decades to 66 in 1990, 62 in 2000 and 56 by 2010. The youthful dependency ratio will show the sharpest decline from 48 in 1980 to 36 in 2010. The elderly dependency ratio will also decline but very slowly, from about 21 to 19. Consequently, the demand of direct income transfers on the working age population will be greatest from the elderly.

As mentioned earlier, considerable strain will be placed on the social security system early in the next century. In 1985, there were about 366,000 elderly drawing social security benefits. But if we assume similar proportions in 2010, we can expect more than 487,000 elderly to receive social security.

Table 3.4
Number of Dependents Per 100 Persons
Aged 18 to 64, United States and Oklahoma: 1980-2010

Year	Total		Under Age 18		Age 65 Years and Above	
	US	OK	US	OK	US	OK
1980	64.6	68.6	46.0	47.6	18.6	20.9
1990	62.5	65.6	41.9	44.6	20.6	20.9
2000	61.8	61.6	40.7	41.8	21.1	19.8
2010	58.1	55.8	36.2	36.4	21.9	19.4

Source: Bureau of the Census, Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*, U.S. Government Printing Office, Washington, D.C., 1984; Oklahoma State Data Center, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, Oklahoma City, 1987.

SEX COMPOSITION

As is the case with the age structure, data on the sex ratio of a population--the number of males per hundred females--is important both in itself and in relation to many public and private planning activities. Moreover, the distribution of the sexes within a population is also important in relation to a variety of social and economic factors within a community. If persons of one sex come to outnumber those of the opposite sex, serious socio-economic imbalances may arise. One example of this is the "shortage" of males brought about by World War II. This period dramatically altered the role of women, as they entered the labor force in numbers unequaled by any other period in American history.

The two primary factors which influence the sex ratio are 1) the sex ratio at birth and 2) sexual differentials in mortality. Typically, the sex ratio at birth is 105, that is, there are 105 males born for every 100 females born. In Oklahoma, males outnumber females about 106 to 100 at birth. Consequently, if not for the intervention of other factors, males would always outnumber females. However, mortality is higher for males throughout the life course, so that the initially high sex ratio is gradually reduced to the point, at about age thirty, where the two sexes are equally distributed. As age increases past thirty, the sex ratio gradually begins to favor women. At older age groups, the sex ratio can be quite low. In Oklahoma in 1980, for example, the sex ratio for those 85 years or older was 43. Mortality differences between the sexes exist for many reasons. Improvements in health care and technology over this century have been of greater benefit to females than males, thereby decreasing female mortality faster than male mortality. In addition, periods of war also increase male mortality and lower the sex ratio. But the basic cause appears to be that women are physiologically superior to males.[4]

Other factors influencing the sex ratio include fertility and migration. Higher fertility levels lead to a younger population, such as occurred after the baby boom. When the population has comparatively large numbers of young people, it raises the overall sex ratio, since males predominate for age groups under thirty.

Another factor which can affect the sex composition is migration. Since males are more likely to migrate than females, a significant migration is likely to add or subtract a disproportionate number of males from a population. The group of migrants who moved into Oklahoma between 1975 and 1980 had a sex ratio of 115.

Oklahoma Sex Composition

Table 3.5 reports the sex composition of Oklahoma and the United States. The sex ratio in Oklahoma for 1980 was 95 males per 100 females. Projections show that this ratio will increase to 97 males per 100 females by the year 2010. A comparison of the sex ratios by age for 1980 and 2010 shows that up until age 64, the ratios are more favorable to males in 2010 than was the case in 1980. However, after age 64, the ratio falls dramatically. The actual age at which females will begin to outnumber males in 2010 is age 52, compared to age 30 in 1980. Oklahoma's sex ratios in 1980 were very similar to those of the United States. For the age groups 15 to 29, Oklahoma had a considerably higher ratio, however. By 2010 Oklahoma's ratios will be higher for the ages 20-64. The projected increase in the sex ratio rests on the assumption that the state will experience positive net migration in the future, that fertility will remain about the same as it is presently and that young males (15-34) will continue migrating to Oklahoma at a faster rate than young females.

The sex ratio has important implications for a variety of social and economic relationships, particularly within age groups. An example of a social relationship affected by the sex ratio is marriage. While many other factors are involved in the search for a suitable marriage partner, the basic supply of members of the opposite sex can be very important. As females put off marriage until they are established professionally, or look for marriage partners after divorce, one of the factors they must consider as they age is the falling number of males in their age group. By 2010, Oklahoma females, however, should be able to find potential husbands with more ease since the sex ratio for the ages 20-64 is increasing.

Table 3.5
Sex Ratios* for Selected Age Groups,
United States and Oklahoma: 1980-2010

Age Group	1980		2010	
	U.S.	Oklahoma	U.S.	Oklahoma
Total	94	95	95	97
0-4	105	105	105	105
15-19	103	107	105	106
20-29	99	103	103	106
30-44	97	97	101	106
45-64	91	91	95	102
65 +	67	68	66	64

Source: Bureau of the Census, Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080,* U.S. Government Printing Office, Washington, D.C., 1984; Oklahoma State Data Center, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010,* Oklahoma Department of Commerce, Oklahoma City, 1987.

* The sex ratio is the number of males per 100 females.

Economic factors that are likely to be affected are buying patterns and advertising, income and employment. In the future females can expect stiffer competition from males in the workplace, since they will be outnumbered by males until retirement. In addition, many other types of public and private planning, particularly military planning and planning of community institutions and services depend heavily upon an investigation of the sex composition.

CONCLUSION

The demographic composition of a population has many social and economic implications. In this chapter we looked at the age and sex composition of Oklahoma in 1980 and at some of the changes we expect to take place before the year 2010.

Oklahoma is aging but will have a younger population than the country as a whole. The state will thus have an older work force and a larger work force in the future than it did in 1980. The labor market will be much easier to enter for young people but will likely provide tough competition for older workers trying to advance their careers. This will be caused by the relatively small group of young adults and large group of older adults (the baby boomers born from 1946 to 1964).

The educational systems will experience continued turmoil as uneven numbers of children and young people come into the various systems. Elementary schools, following the drop in students from 1970 to 1980 will experience more than 20 percent growth by 1995 as the "echo" from the baby boom begins attending school. The high school age population will drop by 11 percent from 1980 to 1990, then slowly rise. The college age population, currently dropping, will begin increasing again by 1995 but not nearly at the rate it climbed between 1960 and 1980.

The elderly population in Oklahoma will grow faster than any other group and the oldest of this group will more than double. The provision of adequate health care and institutionalization for those who need it is a looming concern, particularly after the year 2020 when the oldest baby boomers turn 75.

Oklahoma's sex ratio, the number of males per 100 females, is expected to increase overall and for most age groupings. Females in the workforce can thus expect even stiffer competition for jobs and promotions in the future. At the same time, older females can expect even less male companionship as the sex ratio among those 65 and older is expected to decrease.

End Notes

[1] Lacking population projections by race for Oklahoma, we did not study the implications of this important factor in this report.

[2] The projections assume fertility will remain at its 1979-1981 level to the year 1999 and then decline by 5.5 percent. The total fertility rate will thus start at 1.99 children per woman of childbearing age and then drop to 1.88 children per woman. The projections also assume that life expectancy will improve during the current decade as well as during the 1990s. According to the mortality assumptions, the expectation of life at birth will increase from 69.6 years to 70.9 years for males and 77.8 years to 79.6 years for females between 1980 and 2010.

The projections are based on medium migration assumptions derived by assuming one-half the migrants in Oklahoma's recent migration experience, 1975-1985, would come to the state in the future. Thus, the net amount of migrants (the difference between those coming into the state and those leaving the state) is projected as 15,000 persons per year.

[3] Oklahoma State Bureau of Investigation, Crime in Oklahoma, 1985: Uniform Crime Reports, Oklahoma City, Oklahoma, 1985.

[4] Controlled studies investigating sex differentials in mortality have found that females survive diseases better than males and sex differences in infant mortality show that the male baby is more fragile than the female child. See Robert H. Weller and Leon F. Bouvier, *Population: Demography and Policy*, St. Martin's Press, New York, 1981, pp. 189-191, for a discussion of differences in mortality by sex.

IV

Oklahoma Migration Demographic, Social and Economic Impact: 1975 to 1980

INTRODUCTION

Of the three components of population change, migration holds the greatest potential for bringing rapid and abrupt changes in both the size and composition of a population. Migration brings changes in the size of a population by simply adding to, or subtracting from, the total number of persons. Compositional changes, on the other hand, occur because migration tends to be a highly selective process. That is, migration typically adds to, or subtracts from a population, very distinctive types of people. Generally, people who migrate are most likely to be young adults, have a better education and possess more job-related skills than people who do not migrate. Thus, areas which undergo a significant migration tend to gain or lose persons having these characteristics.

Changes in the size and composition of a population are, in turn, closely interrrelated to changes in economic conditions. For example, an area experiencing substantial economic growth will naturally attract people seeking new or better employment opportunities. Consequently, the resulting inmigration--people moving into an area--may act to restructure an area's population by altering not only the size of the population but also its composition. Moreover, the inmigration itself may further stimulate economic growth and thereby initiate a cycle of economic and population expansion.

In contrast, residents of an economically depressed or declining area may often be forced to relocate in search of higher wages or employment. A large outmigration--people moving out of an area--may eventually contribute to further declines in the economy by depleting the labor pool of its most productive members. This in turn may bring reductions in tax collections and lower consumer spending with the end result being a downward spiral in the economy and further population losses.

Although it is impossible to ascertain the precise impact migration has on the economy of an area, it is possible to determine the characteristics of migrants and thereby estimate the compositional changes which occur. By knowing the socioeconomic characteristics of migrants, we can gain insight into the causes and consequences of their movement.

In this section, we focus on the characteristics of Oklahoma migrants during the period 1975 to 1980 and attempt to analyze the demographic and economic impact of their movement. Data used in this section were obtained from answers to the 1980 Census question on place of residence on April 1, 1975. Although these data are somewhat dated, they nevertheless have the advantage of providing detailed information on the characteristics of migrants as well as their points of origin and destination during this five-year period. This detail makes it possible to identify and describe both inmigrants to the state as well as outmigrants from the state.

This chapter is divided into four parts. The first presents a brief historical overview of migration patterns in Oklahoma during the past 35 years. The second part details the total volume of migration as well as the points of origin and destination of Oklahoma migrants from 1975 to 1980. The third examines the socioeconomic characteristics of migrants for the state focusing on inmigrants, outmigrants and net migrants. The concluding section provides a brief summary of the overall demographic and economic impact of migration on the state.

OKLAHOMA MIGRATION TRENDS: 1950 TO 1986

During the last 35 years, migration in Oklahoma has undergone a series of fluctuations. From 1950 to 1960, the state lost over 218,000 persons to migration but then gained more than 13,000 persons between 1960 and 1970.[1] In the ten years between 1970 and 1980, Oklahoma gained over 241,000 persons and then gained another 120,000 persons between 1980 and 1986.[2]

To understand why these variations in the state's migration patterns came about, it is helpful to examine the connection between large scale population movements and economic conditions. Population losses in Oklahoma between 1950 and 1960 reflected a stagnant and, at times, declining state economy. Consequently, many residents of Oklahoma were probably forced to seek employment opportunities or higher wages outside the state. The slow but steady economic growth in the state between 1960 and 1970 turned this situation around and brought a small inflow of migrants to the state. Next came the extraordinary increase in the price of petroleum in the early 1970s which rapidly accelerated the state's economic growth. As a result, thousands of jobs were created which touched off a large influx of migrants to the state. But with the substantial downturn in the oil and gas industries beginning in 1982 and the subsequent drop in employment, estimates show that Oklahoma has been losing population to outmigration since 1983.[3] However, as Oklahoma's economy begins to recover, there is every indication that the state will again experience moderate gains from migration.

ORIGIN, DESTINATION, AND VOLUME OF OKLAHOMA MIGRANTS

It is important to stress that migration is always a two way process. As some migrants depart a particular location, other migrants are arriving. In Oklahoma's case, while nearly 266,000 residents left the state between 1975 and 1980,[4] almost 424,000 persons from other states and other countries moved to Oklahoma during the same period.[5] Thus, the net gain from migration for the state in this five-year period totaled more than 157,000 persons. We will refer to these persons as "net" migrants in this chapter.[6]

It should be remembered, however, that over 420,000 new persons came into the state; 14 percent of the state's 1980 population entered Oklahoma sometime between 1975 and 1980. Among neighboring states,[7] this proportion ranked second only to Colorado's 21 percent. Colorado also ranked first among Oklahoma's neighbors in the proportion of the population (14.6 percent) who were outmigrants. Oklahoma was fifth with only 8.8 percent of its population leaving the state. In absolute numbers, Texas gained by far the most net migrants in the region with more than 900,000; Coklorado was second, followed by Oklahoma.

Oklahoma gained population from all four regions of the nation as well as from abroad (see Figure 4.1 for depiction of states within regions). Like most of its neighbors, about 10 percent of Oklahoma's inmigrants were from abroad. Texas, with its large Hispanic population, attracted 19 percent of its inmigrants from outside the country. Figure 4.2 shows that the majority of Oklahoma's inmigrants during 1975 to 1980, however, came from the South which contributed 41 percent. Next was the Northcentral region with 27 percent, the West with 25 percent, and finally the Northeast with 6 percent. Oklahoma's neighbors contributed 41 percent of its inmigrants with the largest portion, about 20 percent, originating in Texas. Kansas was second, sending 7 percent of Oklahoma's inmigrants, while 5 percent each came from Missouri and Arkansas, 3 percent from Colorado and 2 percent each from New Mexico and Louisiana.

FIGURE 4.1
MAJOR CENSUS REGIONS IN THE U.S.

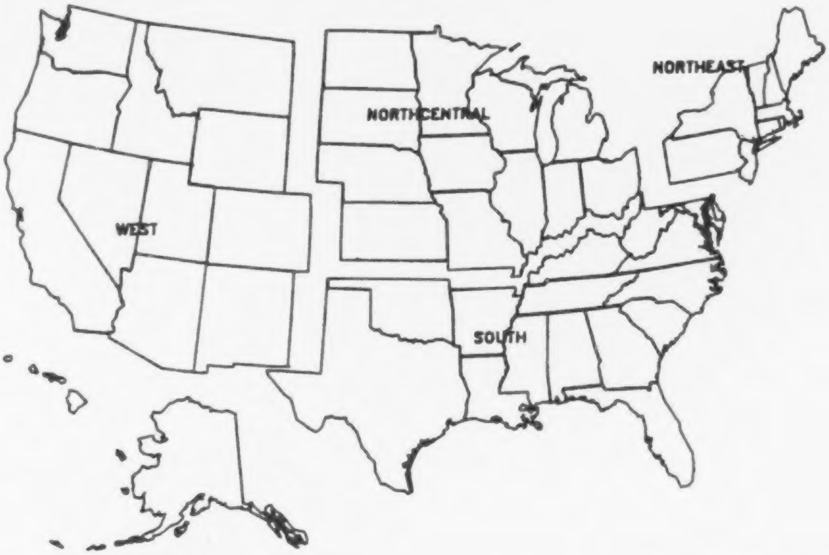
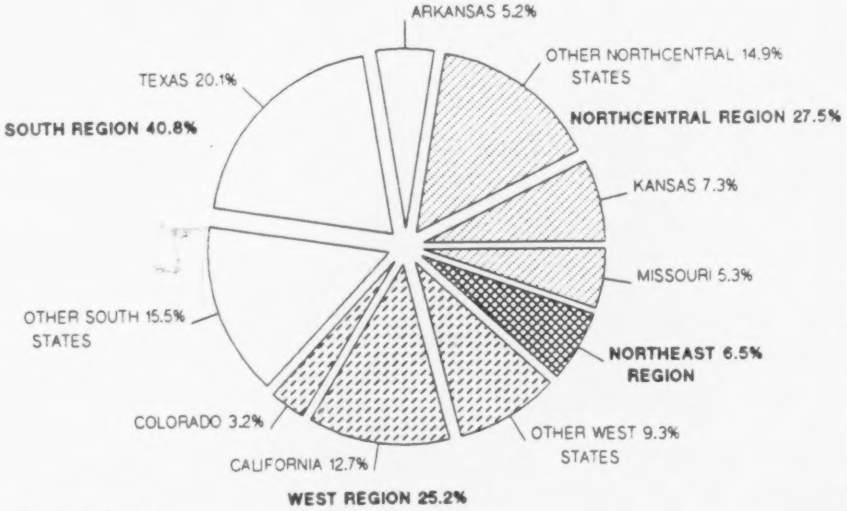


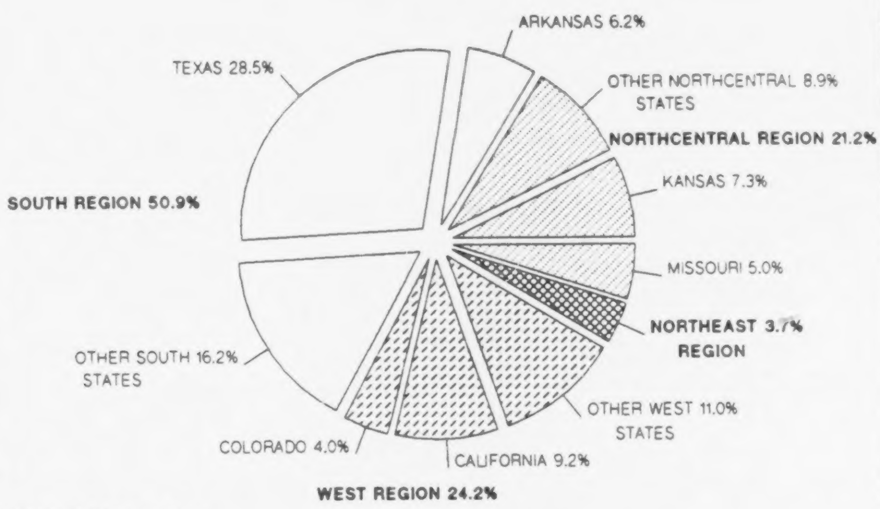
FIGURE 4.2
INMIGRANTS BY REGION/STATE: 1975 - 1980



SOURCE: TABLE A.10

As shown in Figure 4.3, outmigrants from Oklahoma did not move evenly throughout the nation. About half, or 135,000, migrated to the South, one-fourth to the West and one-fifth to the Northcentral states. Comparatively few people from Oklahoma moved to the Northeast, fewer than 10,000, only 4 percent of the state's outmigrants.

FIGURE 4.3
OUTMIGRANTS BY REGION/STATE: 1975 - 1980



SOURCE: TABLE A.10

There was also a large movement of Oklahomans to nearby states with half of Oklahoma's outmigrants moving to neighboring states. Texas, the most frequent destination for Oklahoman migrants, received over 75,000 persons, or about 29 percent of all Oklahoma outmigrants. Second was Kansas, receiving more than 19,000 outmigrants, followed by Arkansas with almost 17,000. California was the only non-contiguous state to which a significant number (24,000) of Oklahomans moved.

Oklahoma gained more net migrants from the Northcentral states (42 percent) than from any other region. That is, Oklahoma was more attractive to migrants from the Northcentral region than vice versa. Next was the West which contributed 28 percent, the South with 18 percent and finally, the Northeast region which contributed 13 percent of the total. Among individual states, Oklahoma gained the largest number of net migrants from California with 24,000, and smaller amounts from two neighbors, almost 9,000 from

Kansas and more than 7,000 from Missouri. Although the largest flow of migrants occurred between Oklahoma and Texas (76,800 inmigrants and 75,800 outmigrants), Oklahoma gained a total of only 1,000 net migrants from Texas.

In short, the movement of thousands of individuals and families during the late 1970s acted not only to increase the size of Oklahoma's population, but also to change its character. Since migration is a selective process, inmigrants to the state tended to differ in some important respects from those persons who were leaving the state. This "replacement" process, therefore, changed the composition of the state's population. The following section attempts to specify in some detail the characteristics of those persons entering the state and leaving the state, as well as the net effect of these opposing migration streams.

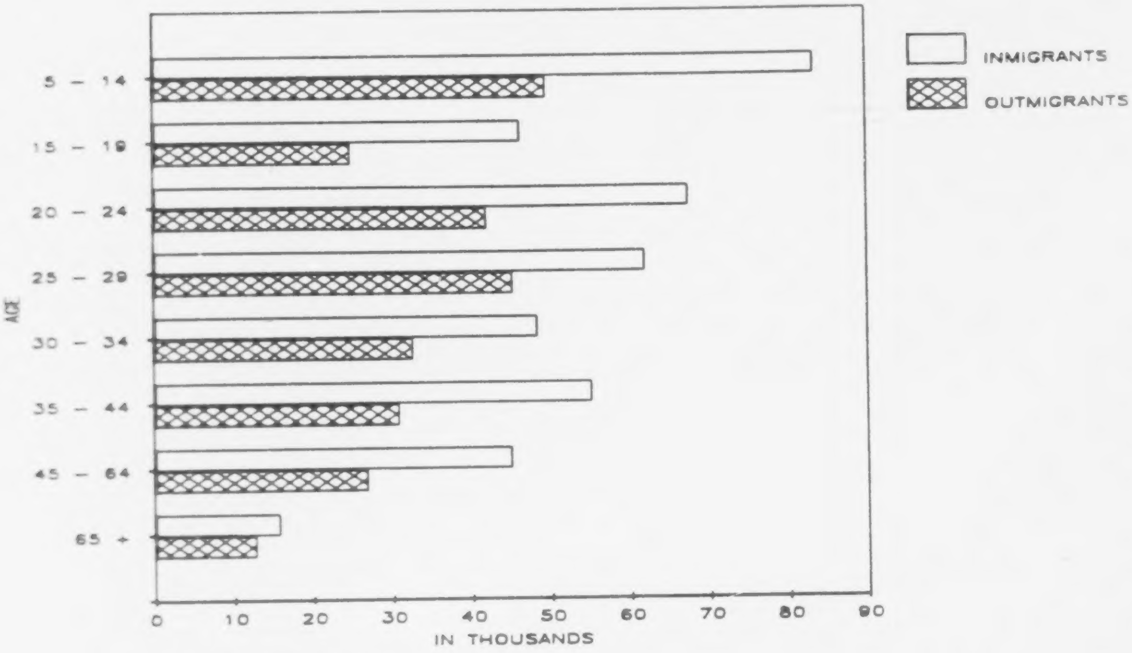
DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OF OKLAHOMA MIGRANTS

Age and Sex

There was a very strong relationship between age and migration in the late 1970s. In Oklahoma, young adults between 20 and 34 years of age were the most likely to move. Examination of Figure 4.4 shows that of the total number of persons who moved into Oklahoma between 1975 and 1980, over 178,000 were aged 20 to 34, which accounts for 42 percent for all inmigration. Yet at the same time, this age group contributed the largest proportion to outmigration with more than 120,000 leaving the state, 45 percent of the outmigration stream. Nevertheless, Oklahoma acquired a substantial net gain of young adults totaling more than 57,000.

The high rates of mobility within this age group reflect the many life changes and experiences which accompany early adulthood. These are the years in which large numbers of people are completing their formal education, entering the military or labor market for the first time, and marrying and beginning families. All of these episodes often entail or require a change in residence.

FIGURE 4.4
INMIGRANTS AND OUTMIGRANTS BY AGE
OKLAHOMA: 1975 — 1980



SOURCE: TABLE A.11

The second most important age group in Oklahoma's migration picture were those aged 5 to 14 (the gain for children under five years of age cannot be measured since their migration status is undefined by the Census). Nearly 84,000 children between these ages, constituting 20 percent of the total inmigrant flow, came to the state during this period. There was a total of almost 50,000 children of this same age group which left the state during this same period. This resulted in a net gain for the state of close to 34,000 children.

Other age groups had less of an impact on Oklahoma's migration patterns. There was a net gain in the state of about 21,000 individuals aged 15 to 19 which accounted for approximately 13 percent of the total net migration. Together, children and teenagers (ages 5-19) comprised 55,000 persons or 35 percent of the total net migrant pool.

The state does not appear to be losing its retirees to retirement states such as Arizona or Florida. Among persons of possible retirement age, those

55 years and over, the state gained nearly 10,000 persons. Of these about 3,000 were 65 years of age and older. Unexpectedly, the majority (70 percent) of net migrants over 65 years of age were male. Among the older elderly, those 75 years and older, Oklahoma experienced a net loss of 700 females but a net gain of 360 males.

In age groups other than the elderly, males and females shared similar patterns of migration, with male migrants slightly outnumbering female migrants. The state's net gain of male migrants numbered close to 88,000 compared to about 70,000 female migrants. About 51 percent of the male net migrants and 49 percent of the female net migrants were between the ages of 15 and 34 years of age.

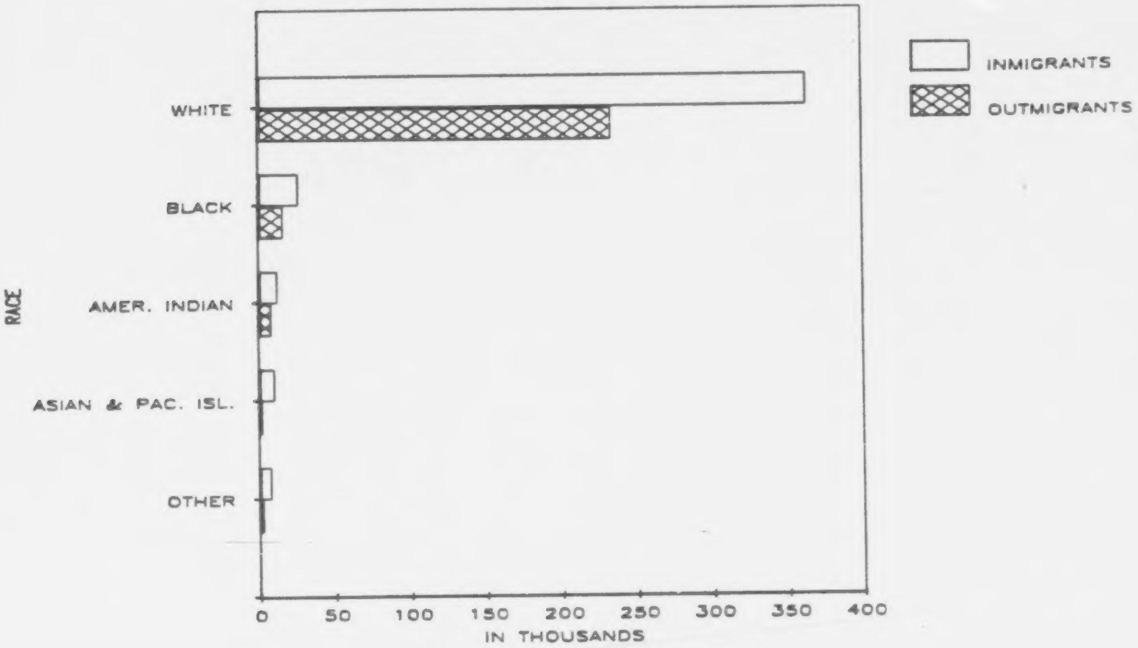
Race and Ethnicity

Migration between 1975 and 1980 produced no substantial changes in the racial and ethnic composition of the state. With a few small exceptions, the racial and ethnic composition of both inmigrants and outmigrants were quite similar to the state's population.

As shown in Figure 4.5, the vast majority of all inmigrants were White. Proportionately, 86 percent were White while six percent were Black. Both of these figures correspond quite closely to the respective proportions of Oklahoma's total 1980 population. However, the more than 10,000 Asian and Pacific Islanders that moved into the state represented a proportion significantly higher than in the total population distribution, 2.6 percent versus 0.6 percent. In contrast, American Indians were slightly underrepresented, composing only 3 percent of the inmigrants compared to 6 percent in the population.

Hispanics, termed "persons of Spanish Origin" in the Census, also comprised a small proportion of total inmigrants, about 4 percent. This is much higher than their proportion in the total population of 1.8 percent, however. More than 16,000 Hispanics moved into the state, while over 7,000 left the state.

FIGURE 4.5
INMIGRANTS AND OUTMIGRANTS BY RACE
OKLAHOMA: 1975 — 1980



SOURCE: TABLE A.14

With the exception of Asian and Pacific Islanders, the racial distribution of outmigrants was similar to that of inmigrants. Eighty-eight percent of the state's outmigrants were White compared to 86 percent in the total population. Blacks composed a little over 6 percent of the outmigrants which was the same proportion as in the population. American Indians were slightly underrepresented in the outmigration flow with 3.3 percent, while Asian and Pacific Islanders and Hispanics had slightly more than their proportion in the population with 1 percent and 3 percent, respectively.

Overall, the state gained 129,400 Whites, 10,300 Blacks, 8,300 Asian and Pacific Islanders, 4,200 American Indians and 9,000 Hispanics (who can be of any race). Thus, the Asian and Pacific Islanders gain of 5 percent of net migrants and the Hispanic gain of nearly 6 percent were greater than their proportions in the total population while Whites and American Indians were slightly underrepresented.

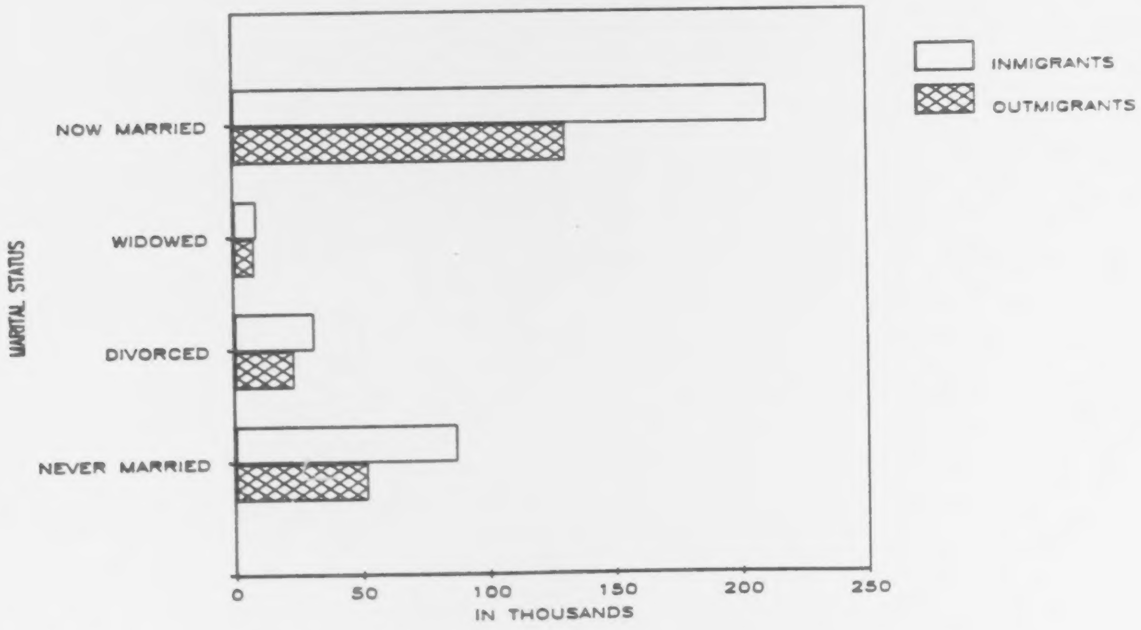
Examination of the age distribution by race indicates that Blacks in the age group 15 to 24 had a higher migration rate than Whites in the same age category. Some of this mobility was probably due to the high rate of Black service in the Armed Forces and the movement to and from Oklahoma's military bases. It is also likely that the high unemployment rates characteristic among young Blacks contributed to their higher levels of mobility.

Marital Status

The marital status of inmigrants closely paralleled that of the total population. Migration also brought very little change in terms of marital status within the state with the net gain from migration being concentrated among married couples. Overall, the state gained nearly 40,000 additional married couples (approximately 80,000 married individuals) compared to the more than 35,000 persons who were never married, 8,000 divorced or separated individuals and about 900 widowed persons.

As shown in Figure 4.6, over 200,000 or 62 percent of all inmigrants 15 years old and over were married. Persons who were never married numbered almost 88,000, accounting for about 26 percent to the inmigration, followed by divorced or separated persons which totaled nearly 32,000 and contributed 9 percent. Widowed persons numbered over 9,000 and accounted for 3 percent of the inmigration. According to the 1980 Census, 63 percent of the total population 15 years old or over were married, 21 percent were never married, 8 percent separated or divorced and 8 percent widowed.

FIGURE 4.6
INMIGRANTS AND OUTMIGRANTS BY MARITAL STATUS
(PERSONS 15 YEARS AND OLDER)
OKLAHOMA: 1975—1980



SOURCE: TABLE A.15

The outmigrants from the state showed similar patterns in marital status. Over 131,000, or a little over 60 percent of the outmigrants 15 years old or over were married, while 53,000 or 24 percent were never married. Divorced or separated persons numbered 24,000, accounting for 11 percent of the outmigration, while widowed persons total 8,000 and represented about 4 percent. Proportionately, there were more divorced and widowed persons leaving the state than entering.

Several consequences are associated with the marital status of the state's migrants. Probably the most apparent is that a net gain of married couples results in the formation of additional stable, higher income, family-oriented households. A second consequence is that an increase in the number of married couples signals the addition of more children, which in turn translates into increased enrollments within the school system as well as the long term consequences of a larger labor force.

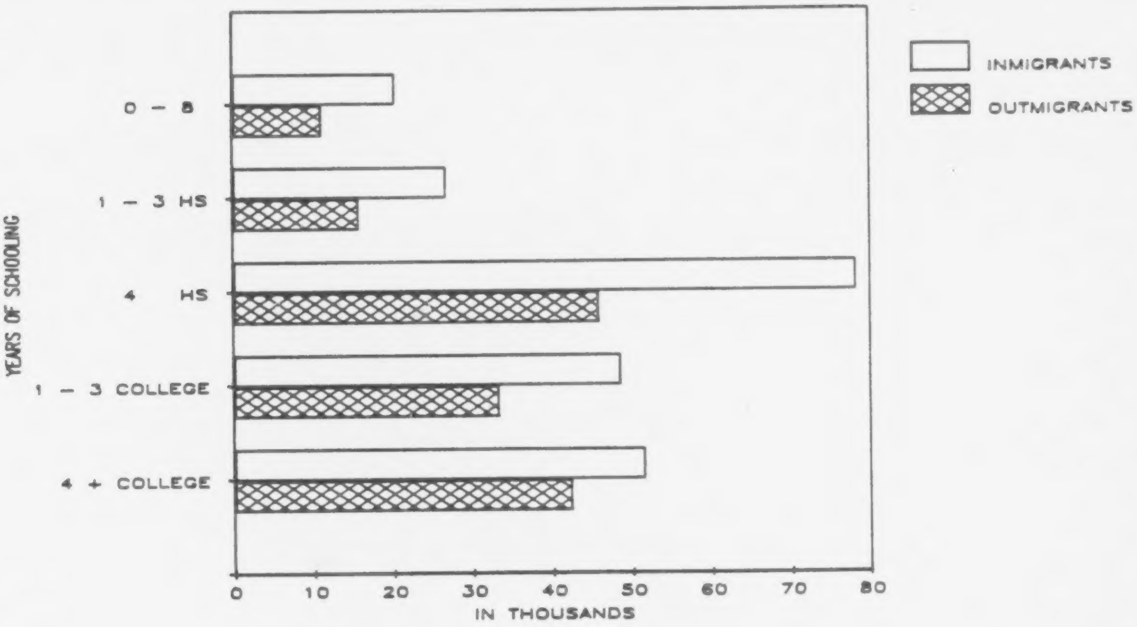
Educational Attainment

Because educational attainment is so closely associated with a number of socioeconomic factors such as occupation, income, consumer buying patterns and social and political attitudes, it becomes a critical population variable. Moreover, changes in a population's educational level can indirectly affect an area's economy, particularly through its impact on the labor force. For instance, a net gain in educated persons can substantially improve the quality and productivity of the work force which, in turn, can help to increase output and possibly attract or generate new industries. The reverse, however, is also true. If an area becomes a net exporter of its most educated residents, economic growth will eventually stagnate and may decline.

It is therefore of particular importance that policy analysts and decision makers stay abreast of any significant changes in the level of educational attainment. While several factors can bring changes in the educational level of an area, migration is one of the most significant variables in accounting for these differentials.

There was considerable movement among all educational categories both in and out of Oklahoma between 1975 and 1980. Among all migrants 25 years of age or older, high school graduates were the most numerous, as Figure 4.7 demonstrates. High school graduates composed about 35 percent of the inmigration for a total of more than 78,000 individuals. Inmigrants with 1 to 3 years of college numbered close to 49,000 and accounted for 21 percent of all inmigration, persons with 4 years of college totaled over 26,000 or 12 percent and those with 5 or more years of college numbered over 25,000 and contributed 11 percent. Finally, the inmigration of persons with less than 12 years of education was substantial, totaling more than 47,000 persons, 21 percent of those moving into the state.

FIGURE 4.7
INMIGRANTS AND OUTMIGRANTS BY YEARS OF SCHOOL COMPLETED
(25 YEARS AND ABOVE)
OKLAHOMA: 1975 — 1980



SOURCE: TABLE A.18

Although the numbers were quite different, the overall distribution of the outmigrant flow within educational categories was similar to the inmigrant flow. Again high school graduates were the most numerous making up 31 percent of the outmigration stream with nearly 46,000 persons leaving the state. Twenty-two percent of the outmigrants had 1 to 3 years of college, and 18 percent, or 27,000 outmigrants, had less than 12 years of education. Persons with 4 years of college totaled 22,000 which made up 15 percent of the outmigration flow while 14 percent, or 20,000 individuals, had 5 or more years of college. A larger proportion of outmigrants over inmigrants had earned college degrees, 29 percent versus 23 percent.

Oklahoma experienced a net gain among all educational categories. Three-quarters of the state's net migrants were at least high school graduates, compared to 67 percent of the total population. The state's workforce was significantly affected by net gains of college educated migrants. There were net increments of 9,000 college graduates and 15,000 others who had attended but not graduated from college. The gains from these groups made up 32 percent of the total net migration gain, about the same as their proportion in the state's population. The net gain of college graduates, however, fell short of their proportion in the total population, 12 percent versus 15, respectively. The net gain of those with graduate degrees (five or more years of college), however, is nearly equal to the 7 percent in the state. On the other hand, fewer net migrants were poorly educated, since only 12 percent had an elementary education (0-8 years) compared to 18 percent of the state.

Although the people who left the state were somewhat better educated than those who entered, it should be stressed that a larger portion of the state's net migrants had at least a high school diploma compared to the total population. This, in itself, represents a significant gain in human capital. In addition, Oklahoma was relatively competitive in comparison with neighboring states. Kansas and Missouri actually experienced a net loss of persons with four or more years of college while gaining a disproportionate number of persons with less than a high school education. Oklahoma also faired better than Arkansas in attracting persons with at least some college education and advanced degrees. These three states in the region, thus, had a significantly larger proportion of persons without a high school diploma move to their states.

Labor Force Status

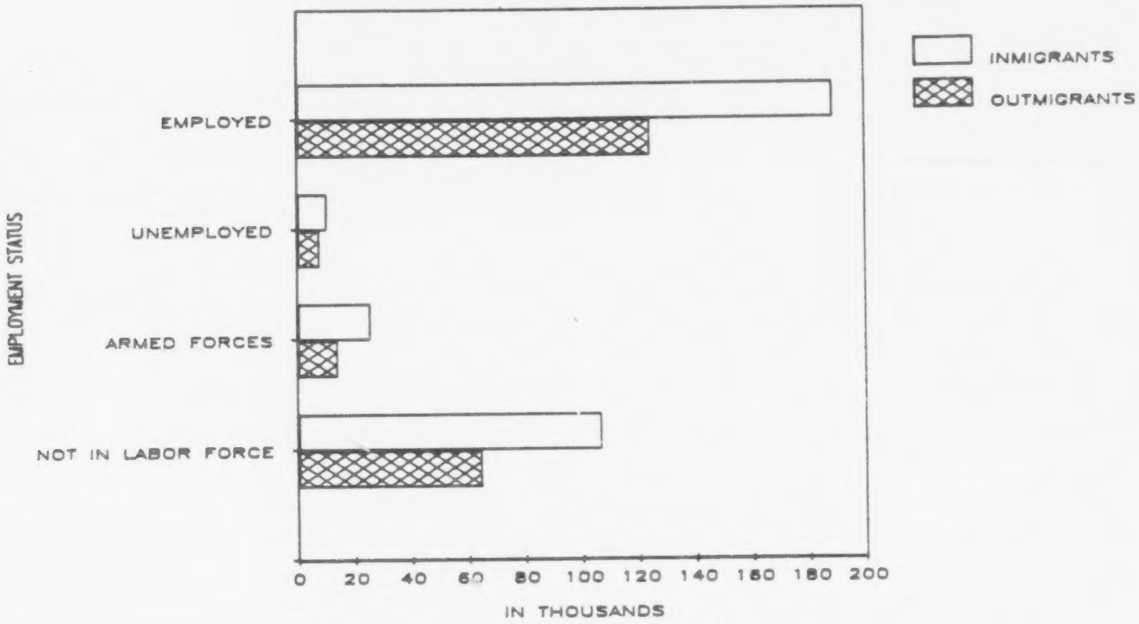
The search for new or better employment opportunities is one of the primary motivations underlying the decision to move. As a result, migration redistributes the labor force from areas having a surplus of labor to those experiencing shortages. In Oklahoma's case, the rapid expansion of the oil and gas industries during the latter part of the 1970s brought unprecedented economic growth. Thousands of new jobs were created which attracted a massive inflow of individuals to the state seeking better employment.

The state experienced a substantial net gain of more than 64,000 economically productive individuals aged 16 years and over. A comparison of the proportion of migrants in the different labor force categories with that of the total population 16 years and over shows that a slightly lower proportion of net migrants were employed than in the total population, 56 percent in the total population versus 53 percent of the net migrants. Yet only 2.2 percent of the 121,000 net migrants 16 and over were unemployed, which was very similar to the state's proportion of 2.4 percent. It should be recalled that the data represent employment status in 1980, after the migration had already occurred. It is therefore not possible to determine the employment status of these migrants prior to their move. However, it is reasonable to assume that the majority of the migrants had a similar employment status in 1975.

The state experienced a substantial gain of more than 11,000 military personnel from 1975 to 1980. This gain represented almost 10 percent of the net migration even though military personnel make up only 1 percent of the state population. Although it is true that the movement of military personnel is independent of state and local government, it nevertheless has a substantial and positive economic impact on the state, particularly in those localities with military establishments.

As shown in Figure 4.8, the majority of both inmigrants and outmigrants were employed. Of the total 333,000 inmigrants aged 16 and over, 57 percent were employed, 3 percent were unemployed, close to 8 percent were in the military, and 32 percent were not in the labor force. With two exceptions, these figures correspond quite closely with the respective proportions in the state population. The migrant military population was high compared to the state population; 8 percent of inmigrants compared to only 1.3 percent of the state's population. In addition, there were proportionately fewer inmigrants who were not in the labor force compared to the state population (32 versus 40 percent). Most of those who were categorized as "not in the labor force," that is, not employed, unemployed or in the military, were students, housewifes and retired persons. The female inmigrant population was evenly split between those participating in the labor force and those not, with 52 percent employed, unemployed or in the military and 48 percent not in the labor force. Only 18 percent of male inmigrants were not taking part in the labor force or the military.

FIGURE 4.8
INMIGRANTS AND OUTMIGRANTS BY EMPLOYMENT STATUS
(16 YEARS AND ABOVE)
OKLAHOMA: 1975 – 1980



SOURCE: TABLE A.17

The labor force status of outmigrants was very similar to that of the inmigrants. Of the 212,000 outmigrants aged 16 and over, 59 percent were employed, 4 percent were unemployed, 7 percent left for the Armed Forces outside the state, and 31 percent were not in the labor force. As with the inmigrants, the labor force status by sex for outmigrants was unevenly distributed. Far fewer females were in the labor force while a much larger proportion of males were in the military. The proportion for female outmigrants not in the labor force was 46 percent compared to 31 percent for males. Sixty-eight percent of the male outmigrants were employed compared to 49 percent of females. Male outmigrants in the Armed Forces were overrepresented with 12 percent compared with 1 percent for females. The unemployment rate was very similar with 3.9 percent for males and 3.7 percent for females.

Examination of the labor force status of net migrants aged 16 years and over by sex shows that this distribution was also unequal. Sixty percent of the male net migrants were employed compared to 45 percent of the female net migrants. While the proportion of unemployed was identical for both females and males (2.2 percent), 16 percent of the male net migrants were in the Armed Forces compared to only 1 percent for females. Finally, 52 percent of female net migrants were not in the labor force in comparison to 35 percent for males.

The future of the labor force in Oklahoma depends upon a number of factors. Continued population growth, which in large part is a reflection of positive net migration, is necessary to maintain an adequate labor force. Recent estimates, however, have shown that Oklahoma has been losing population to migration since 1982. This loss could have an adverse impact on the state's future work force by reducing its size and changing its composition. But the presence of a vital labor force is also a function of the demand for labor which, in turn, depends on sufficient capital investment and economic expansion. As Oklahoma's economy continues to improve, the future prospects of Oklahoma's labor force should be positive.

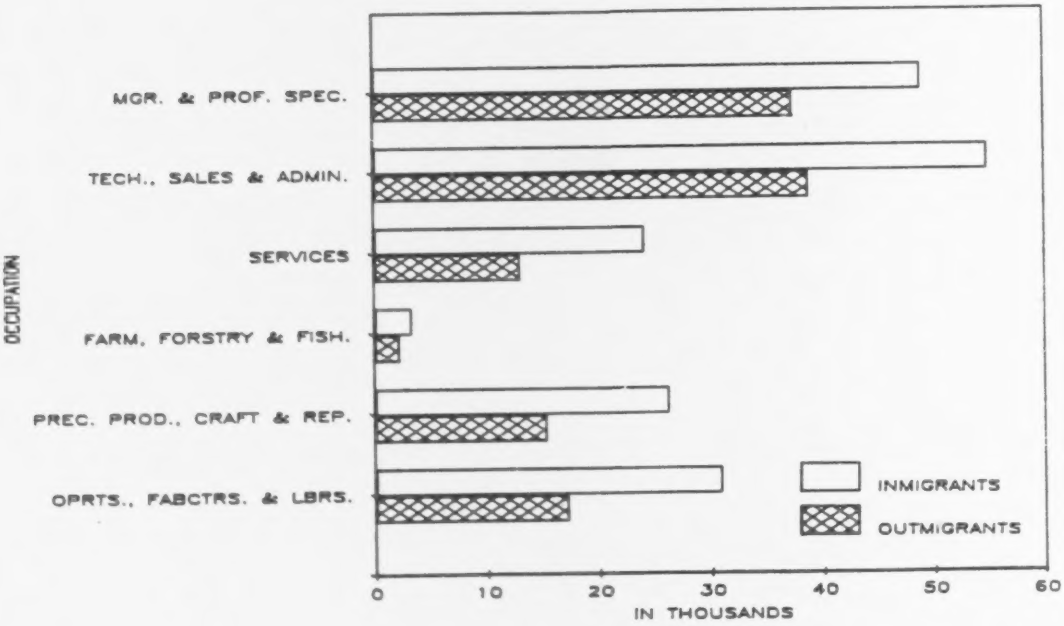
Occupation and Industry

In terms of the occupations and industries in which migrants worked in 1980, the state gained in all the major economic categories. Although Oklahoma gained in both white-collar and blue-collar occupations,[8] the former category was overrepresented in the migration in both directions across the state's borders, particularly in the outmigration flow. While white-collar workers made up 51 percent of the workforce in the state, they comprised 55 percent of inmigrant workers and 61 percent of outmigrant workers.

Overall, Oklahoma had a net gain of 64,000 persons employed in various occupations.[9] Of these, 28,000 persons held white-collar occupations while 37,000 held blue-collar jobs, accounting for 43 and 57 percent of the net migration, respectively. Among the individual categories of occupations, the less skilled blue-collar categories containing machine operators, fabricators and laborers topped the list among net migrants with 21 percent. This is not surprising as the majority of new jobs which spun off from oil and gas related industries called for these types of skills. Other categories with large gains include precision production with 17 percent and service occupations (other than household and protective services) with 16 percent.

Among inmigrants, 55 percent belonged to white-collar occupations compared to about 45 percent in blue-collar occupations. As can be seen in Figure 4.9, 49,000 white-collar workers were concentrated in managerial and professional occupations. These white-collar occupations accounted for 26 percent of the total inmigration. The remaining white-collar jobs were composed of technicians, sales and administrative support occupations which numbered 55,000, about 29 percent of the total. One-fourth of white-collar inmigrants were professionals, such as scientists and engineers, geologists, teachers and librarians and others, while another one-fourth were clericals and other administrative support personnel.

FIGURE 4.9
INMIGRANTS AND OUTMIGRANTS BY OCCUPATION
16 YEARS AND ABOVE
OKLAHOMA: 1975 — 1980



SOURCE: TABLE A.18

Among the blue-collar occupations, the less skilled group, containing machine operators, fabricators and laborers represented the largest proportion with 16 percent of total employed inmigrants (31,000), followed by 14 percent (26,000) in precision production, crafts and repair. Service industries contributed the next largest proportion with 12 percent (22,000), while the remainder of blue-collar occupations were distributed among farming, forestry, and a variety of household and protective services. More than one-third of all blue-collar workers were employed as operators, fabricators and laborers.

The occupational distribution of outmigrants was more heavily skewed toward white-collar occupations than was the inmigrant distribution; 61 percent were white-collar and 39 percent were blue-collar. About 30 percent of outmigrants were located in managerial and professional occupations with the remainder of white-collar workers being located in sales, administrative and clerical jobs. Blue-collar outmigrants were again concentrated in the occupations of precision production and skilled laborers.

Male inmigrants and outmigrants were concentrated in managerial and professional, precision production, and operator and fabricator occupations, whereas female inmigrants and outmigrants were mostly located in administrative support, services, managerial and professional.

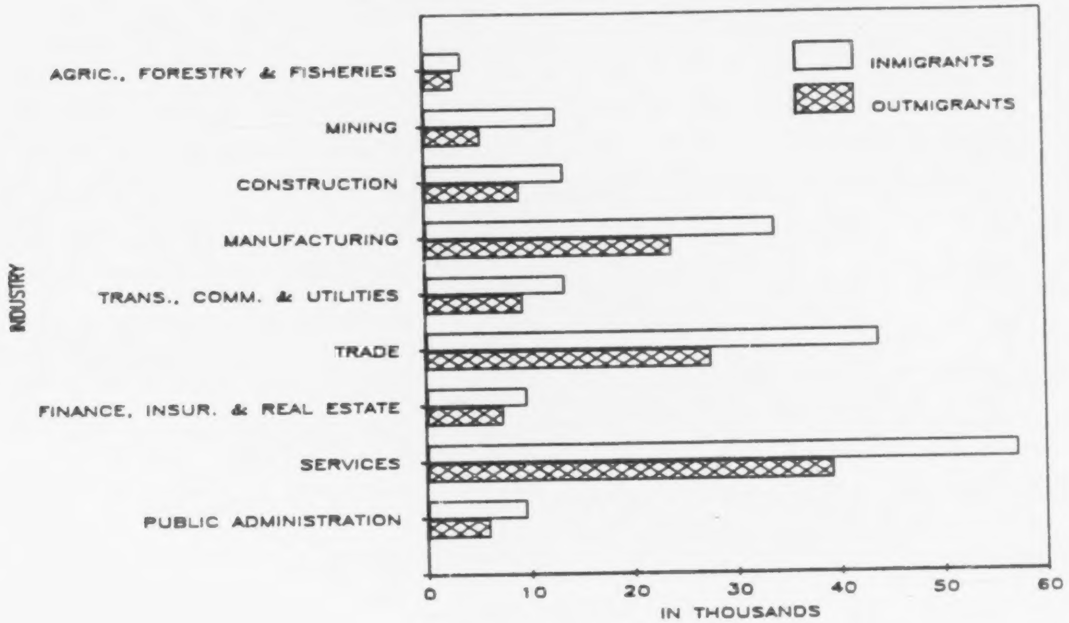
By considering employment by industry rather than occupation, we see that Oklahoma gained workers in all major industrial sectors. The highest net gain was in services with 27 percent (18,000), followed by trade with 24 percent (16,000) and manufacturing with 15 percent (10,000). The mining industry also gained a substantial number of net migrants, adding more than 7,000. Smaller gains took place in the construction and transportation industries which added 4,000 each.

Male net migrants were concentrated in manufacturing, trade, services and mining. Females were heavily concentrated in just two industries, retail and wholesale trade and services. Female net migrants were two and one-half times more likely to work in the service industry than were males.

As displayed in Figure 4.10, the largest inmigration by industrial sector was in services with 29 percent. This was closely followed by trade which contributed 21 percent, manufacturing with 17 percent, and mining and construction with 7 percent each. The remaining categories were fairly evenly distributed.

Outmigrants were also concentrated in services (with 30 percent) and manufacturing (18 percent). The remaining one-third of all outmigrants worked in the other six major industrial sectors.

FIGURE 4.10
INMIGRANTS AND OUTMIGRANTS BY INDUSTRY
— 16 YEARS AND OVER
OKLAHOMA: 1975 — 1980



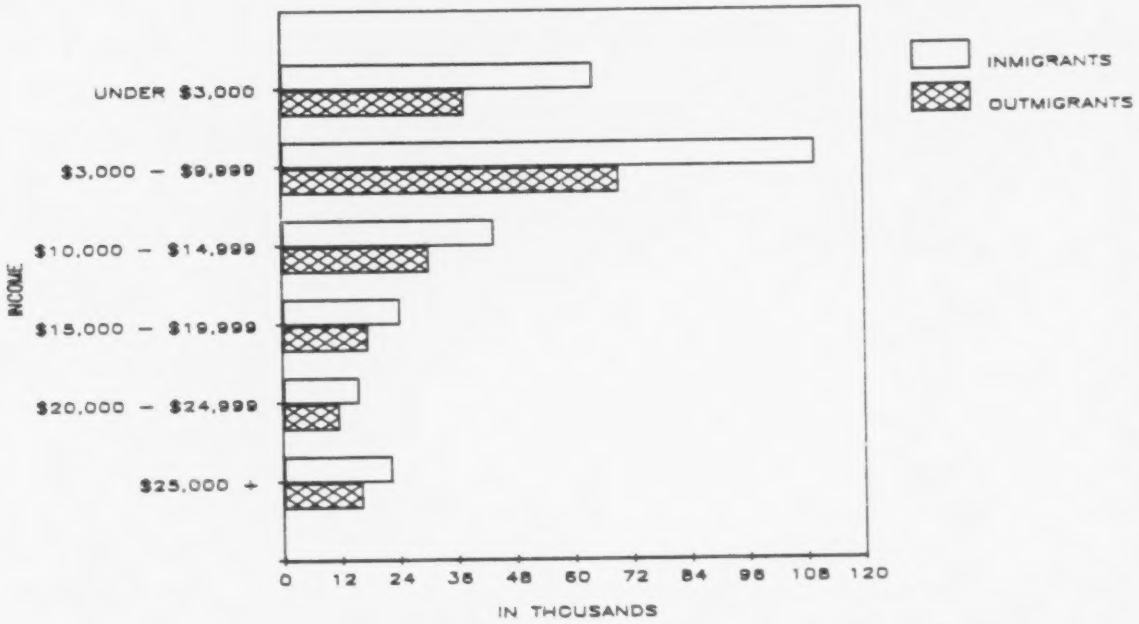
SOURCE: TABLE A.19

Income

Given the net gain of economically productive individuals from migration, it is at first surprising that migration did not have a more positive impact upon the state's income profile. Oklahoma gained persons in all income categories, but as Figure 4.11 shows, a large portion of all migrants (more than one-fifth) had incomes below $3,000. A person with this income who lived alone would be considered living in poverty in 1979, when the poverty level for a single person living alone was $3,700. Since income increases with age and people who move tend to be younger, we would expect the income of migrants to be lower. However, those entering the state were slightly poorer than both the state's population at large and those who left the state. Compared to an average state income of $7,600, the average incomes of inmigrants and outmigrants were $7,500 and $8,200, respectively.

Because income is measured by the Census as of 1979, it is likely that some inmigrants reported the income they earned in Oklahoma. Since we have no way to measure their incomes before they moved to Oklahoma, there is some ambiguity in making inferences about the effect on the state resulting from the income differentials of migrants. The same, of course, is true for outmigrants; some incomes may reflect what has been earned in their new residences, rather than income earned in Oklahoma.

FIGURE 4.11
INMIGRANTS AND OUTMIGRANTS BY INCOME
AGE 15 AND ABOVE
OKLAHOMA: 1975 — 1980



SOURCE: TABLE A.20

Nonetheless, it is clear that the distribution of inmigrant income closely resembled that of the state's population. For example, the proportion of those making high incomes, more than $25,000, was 8.0 percent for inmigrants and 7.4 percent for the state, while the percentage with incomes under $3,000 was 22.9 percent versus 23.3 percent.

Outmigrants were relatively better off than either inmigrants or the population, but only slightly. The proportions of lower and higher incomes for those who left the state were 20.7 percent and 8.9 percent, respectively. The net effect on the state was to make it ever so slightly poorer. Sixty-nine percent of net migrants had incomes below $10,000 compared to 61 percent of the total population, while 6 percent of net migrants versus 7 percent of the state had higher incomes of $25,000 or more.

There was also a definite sex differential in migrant income. Male inmigrants had an annual median income of $10,400 compared to $4,300 for female inmigrants. This differential persisted among outmigrants as males had an annual median income of $11,500 versus $4,800 for females. This differential was also maintained by net migrants. While 56 percent of male net migrants earned incomes below $10,000, 91 percent of female net migrants had incomes under $10,000. Correspondingly, while one of every 10 male net migrants had an income of $25,000 and more, only one in a thousand female net migrants had such an income. The state was thus more attractive to males with higher incomes than to higher-income females. The state gained only 56 higher income females (with incomes of $20,000 or more), but gained over 10,000 such males.

CONCLUSION

The foregoing analysis provided a brief overview of the characteristics of Oklahoma migrants between 1975 and 1980 and suggested possible migration effects on the state's population composition and economic climate. Overall, it appears that the migration which occurred in Oklahoma during this period possessed a very definite character which, on the whole, was generally favorable. Two important relationships emerged from our analysis which bear reemphasis.

The first is that although there are a variety of forces at work in the state's migration picture, economic and employment considerations certainly occupy a highly significant role. While it is true that, from the point of view of the individual migrant, a number of factors other than economic ones operate to affect the decision to move, examination of the overall migration picture in the state clearly suggests a close interrelation between mobility and economic factors.

The second important relationship is between the socioeconomic status of migrants and the composition of the state's population. While migration did not bring large numbers of affluent individuals to the state, it did bring individuals who were, on the whole, young, relatively well educated and economically active. It would appear then, that Oklahoma benefited not only by expanding its labor force with experienced and relatively well trained individuals, but also through the economic stimulation resulting from population growth. In terms of the racial and ethnic composition of the state's population, the migration brought very little change. The racial and ethnic makeup of the state's net migrants coincided quite closely to that of the state as a whole.

It should be pointed out that as a consequence of the sharp decline in the oil and gas related industries, Oklahoma has since experienced another significant migration. While all the data are not yet in, estimates indicate that the state has been consistently losing population since 1983. And it appears that this outmigration has had an overall negative impact. That is, those that are most likely to move--the young, educated and skilled--are leaving the state in significant numbers. As Oklahoma's economy continues to improve, however, there is every reason to expect that the state will once again gain from migration. Whatever occurs in the future, migration is likely to continue to affect the state and is worthy of additional study.

End Notes

[1] Migration is discussed in more detail in Chapter II. Also, see Table A.1 in the Appendix.

[2] Source is Table A.2 in the Appendix.

[3] See Table A.2 in the Appendix.

[4] While we are able to measure the number of persons who moved into Oklahoma from abroad, there is no count of Oklahomans who moved abroad. Therefore, the actual number of outmigrants is higher than the 266,000 but we do not know how much higher.

[5] Migration numbers in this section do not include children under five years of age. Because the Census question asks for residence five years prior to April 1, 1980, these children were not yet born and are therefore excluded from the designation of migration status.

[6] The net migrant is actually a statistical creation rather than an actual person. It reflects the net effect on the state's population of the opposing migration streams.

[7] States bordering Oklahoma (Kansas, Colorado, New Mexico, Texas, Arkansas and Missouri), plus Louisiana.

[8] White-collar jobs are in two main areas; managerial and professional specialties (e.g., accountants, buyers, teachers, lawyers, managers and administrators) and technical, sales and administrative support (e.g., technicians, pilots, computer programmers, sales representatives, bookkeepers and secretaries). Blue-collar occupations include the categories of services (food service, janitors, barbers, police and firefighters, cooks and child care workers); farming, forestry and fishing; precision products, craft and repair (mechanics, locksmiths, carpenters, metalworkers, miners and oil well drillers); and operators, fabricators and laborers (machine operators, welders, truck drivers, garbage collectors and construction workers).

[9] Occupational status was collected only on those who were employed in 1980 in the civilian labor force. We do not know how many migrants changed their occupations while migrating.

V
Conclusion

This report has detailed the projected changes in the size and composition of Oklahoma's population from 1980 to 2010. Some of the implications for the social, political and economic climate of the state have been examined for their potential in aiding governments, businesses, private agencies and community organizations in the process of policy formulation. We hope the reader will come away with an increased awareness of some of the dynamics of population change. Throughout this report, we have attempted to stress the position that demographic processes and the social and economic life of the state are closely interrelated. Thus, to formulate either economic or social policies without taking into account demographic characteristics leads to incomplete and ill-formed policies. In relation to this effort, it is important to reemphasize the role and force of population variables in bringing about social and economic change.

Although there is an inherent assumption by many that population growth is preferable to loss or stagnation, there is very little consensus on the appropriate population size or rate of population growth for the state. Some people feel that rapid population growth creates more short-term problems than positive, long-term gains and therefore should be avoided. However, even in the absence of specifically formulated population policies, the state may still have a myriad of de-facto policies that unintentionally affect demographic processes and population growth. The recruitment and location of industries, while not directly controlled by governments, directly impacts future growth and migration to an area, as does the location of highways, the development of recreation areas, and local zoning and building codes. These activities can influence migration, thereby directly increasing a population in one area and potentially decreasing it in another. Other policies may indirectly affect fertility and mortality, such as the support of family planning, the administrative rules used in allocating various transfer payments, maternity leave policies, support of medical research, measures to lower infant mortality and the provision of affordable child care facilities.

These policies may make raising a family or saving a life easier, thereby helping to increase or decrease fertility and/or mortality and enlarge or shrink the size of the population.

From reading this report, the reader should be aware of at least some of the consequences of unanticipated growth or loss on a state. Oklahoma's population growth was severely interrupted by the depression in the oil market and drought of the 1930s. The three decade long outmigration initiated by the "dust bowl" robbed the state of nearly one-third of its potential population. Due to its healthy sized natural increase, however, the state only became 3 percent smaller between 1930 and 1960. Oklahoma has since recovered some population momentum and is expected to grow moderately in the next 25 years. The state's growth will be about average for the region.

Although the examination of the implications of demographic change presented in this report is by no means exhaustive, it does provide a general understanding of several important issues. Among the most important contributions of this report are: first, it identifies the link between continued population expansion and the general health of the state's economy. In order for any economy to prosper, it must have available a labor force which is both adequate in size and properly trained. Our projections point out two possible scenarios. On the one hand, there exists the possibility of a labor shortage sometime late this century, particularly for those businesses which rely heavily on younger workers. However, the increased labor force participation rates among women, in conjunction with delayed retirement and increased automation, may offset this shortage.

Second, despite even population growth, there will still be consequences to the state arising from compositional changes within the population. The uneven number of children and young adults in the population throughout the remainder of this century will force constant adaptation by the educational systems in the state. Educational leaders must be able to react quickly to these changing compositional patterns.

Third, this report outlines the revolutionary changes in store for the state as a result of the increase in the number of our elderly citizens. Given the general financial and health difficulties associated with old age, the existence of a large elderly population raises the question of repsonsibility for their welfare. If state and local governments shoulder the responsibility, substantial strains on their respective economies could occur. In order to control rising health care cost while at the same time maintaining a high level of quality care, it appears that a significant restructuring of the system by which health care is financed and delivered is needed. More attention will be demanded by this population in the future.

Fourth, our investigation found that, on the whole, Oklahoma's migration had little effect on the composition of the state's population. The migrants which settled in the state were generally young, relatively well educated and economically productive. However, our report found that, all too often, our most educated citizens leave the state. In order to curb this outflow, we must reinforce our dedication to diversify the state economy as well as actively pursue technology based businesses to locate here in our state.

Finally, the demographic and economic forces that are shaping Oklahoma will affect a number of social and economic institutions for a number of years to come. The recognition and study of current and future demographic characteristics will help broaden the understanding of policymakers and hopefully lead to more informed and effective policies. The Oklahoma State Data Center and the Oklahoma Department of Commerce stand ready to continue to provide the necessary analysis and trends for Oklahoma's citizens.

APPENDIX

TABLES

Table A.1
Components of Population Change for Oklahoma, Selected States and the United States, 1950-1980

(in 000's)

	1950-1960			1960-1970			1970-1980[1]		
	Net Change[2]	Natural Increase[3]	Net Migration[4]	Net Change	Natural Increase	Net Migration	Net Change	Natural Increase	Net Migration
Oklahoma	95	314	– 219	231	217	13	466	173	241
Arkansas	– 123	309	– 433	137	208	– 71	363	132	187
Colorado	429	266	164	453	238	215	680	234	404
Kansas	273	318	– 44	70	201	– 130	115	134	– 63
Louisiana	574	623	– 50	386	516	– 130	561	373	107
Missouri	365	496	– 130	358	355	2	239	226	– 85
New Mexico	270	217	52	65	195	– 130	286	143	129
Texas	1,868	1,755	114	1,617	1,471	146	3,031	1,256	1,667
United States	27,997	25,337	2,660	23,912	20,841	3,070	23,244	13,965	6,573

[1] Because of significant improvements in coverage in the 1980 Census compared to 1970, the net change column contains some error. That is, a portion of the 466,000 persons added to Oklahoma's population between 1970 and 1980 were residents of the State in 1970, but were missed in the Census. Therefore, natural increase plus net migration does not equal net change over the decade.

[2] Net Change is the number of persons added to the state's population over the decade.

[3] Natural Increase is the excess of births over deaths in the state. Lacking any migration, the population would increase by this amount.

[4] Net Migration is the difference between the number of persons moving into the state and the number moving out.

Source: U. S. Department of Commerce, Bureau of the Census, *Current Population Reports*, Series P-25, Nos. 227, 460 and 957, plus unpublished estimates of illegal immigrants entering the U.S. and states over the decade 1970-1980.

Table A.2
Annual Components of Population Change, Oklahoma: 1980-1986*

	Population	Change	Births	Deaths	Net Migration	Cumulative Net Migration
1980	3,025,500	-	-	-	-	-
1981	3,108,000	82,500	65,000	35,000	52,500	52,500
1982	3,233,000	125,000	56,000	29,000	98,000	150,500
1983	3,312,000	79,000	58,000	29,000	50,000	200,500
1984	3,312,000	-0-	55,000	29,000	– 26,000	174,500
1985	3,306,000	– 6,000	55,000	29,000	– 32,000	142,500
1986	3,305,000	– 1,000	52,000	30,000	– 23,000	119,500

Source: Bureau of the Census, *Current Population Survey*, Series P-25, Nos. 911, 927, 944, 957, 970 and Oklahoma Employment Security Commission.

* Population and components as of July of each year.

Table A.3

Total Fertility Rates for Oklahoma and Selected States: 1950-1980

	1950	1960	1970	1980
Oklahoma	2,978	3,409	2,364	2,022
Arkansas	3,214	3,696	2,557	1,977
Colorado	3,304	3,650	2,349	1,788
Kansas	3,131	3,712	2,146	2,013
Louisiana	3,546	4,077	2,679	2,147
Missouri	2,921	3,631	2,398	1,902
New Mexico	4,067	4,550	2,865	2,237
Texas	3,286	3,800	2,657	2,133
United States	3,091	3,654	2,480	1,840

Sources: Rates calculated by Oklahoma State Data Center using birth data from the *Natality Reports, 1950-1980*, of the National Center of Health Statistics and female population 15-44 from the Census of Population, *General Population Characteristics, 1950-1980*, of the U.S. Bureau of the Census. United States' rates are from Donald J. Bogue, *The Population of the United States*, The Free Press, New York, 1985.

Table A.4
Census Population, Estimated and Projected Population for Oklahoma, Selected States and the United States: 1900-2000
(in 000's)

	1900	1910	1920	1930	1940	1950	1960	1970	1980	1986	1990	2000
Oklahoma	790	1,657	2,028	2,396	2,336	2,233	2,328	2,559	3,025	3,305	3,419	3,753
Arkansas	1,312	1,574	1,752	1,854	1,949	1,910	1,786	1,923	2,286	2,372	2,541	2,791
Colorado	540	799	940	1,035	1,123	1,325	1,754	2,210	2,890	3,267	3,554	4,182
Kansas	1,470	1,691	1,769	1,881	1,801	1,905	2,179	2,249	2,364	2,461	2,463	2,494
Louisiana	1,382	1,656	1,798	2,102	2,364	2,684	3,257	3,645	4,206	4,501	4,747	5,160
Missouri	3,107	3,293	3,404	3,629	3,785	3,955	4,320	4,678	4,917	5,066	5,190	5,440
New Mexico	195	327	360	423	532	681	951	1,017	1,303	1,479	1,584	1,853
Texas	3,049	3,897	4,663	5,825	6,415	7,711	9,580	11,199	14,226	16,682	17,641	20,332
United States	76,212	92,228	106,022	123,203	132,165	151,326	179,323	203,302	226,546	241,077	249,203	267,461

Sources: Census Population: Bureau of the Census, Characteristics of the Population, *Number of Inhabitants*, United States Summary, Government Printing Office, 1983. 1986 estimate: Bureau of the Census, Current Population Reports, *Local Population Estimates*, Government Printing Office, 1982. Projections For United States, Louisiana and Kansas: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 937, *Provisional Projections of the Population of States, by Age and Sex: 1980 to 2000*, Government Printing Office, 1983. Projections for Other States: Oklahoma State Data Center, Oklahoma Department of Commerce, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, January, 1987. Pollard, Forrest H., Mary A. McGehee and Brian R. Mills, *Provisional Projections of the Population of the State of Arkansas, by County, 1980-2000*, Demographic Bulletin, No. 2, University of Arkansas, May 1986. Division of Local Government, Colorado Department of Local Affairs, *Colorado Population Projections*, October, 1986. Missouri projections prepared by the Missouri Division of Budget and Planning for the *Report of the Missouri Opportunity 2000 Commission*, August, 1987. The University of New Mexico, *Population Projections for New Mexico Counties: 1980-2005*, November, 1986. State Health Planning and Resource Development, Texas Department of Health, Population Data System, *Total Population Summary Tables, Texas Counties, 1970-2000*, July, 1986.

Table A.5
Percent Change in Population for Oklahoma, Selected States and the United States: 1900-2000

	1900-1910	1910-1920	1920-1930	1930-1940	1940-1950	1950-1960	1960-1970	1970-1980	1980-1986*	1980-1990	1990-2000
Oklahoma	109.7	22.4	18.1	– 2.5	– 4.4	4.3	9.9	18.2	9.3	13.0	9.8
Arkansas	20.0	11.3	5.8	5.1	– 2.0	– 6.5	7.7	18.9	3.8	11.1	9.8
Colorado	48.0	17.6	10.1	8.5	18.0	32.4	26.0	30.8	13.0	23.0	17.7
Kansas	15.0	4.6	6.3	– 4.3	5.8	14.4	3.2	5.1	4.1	4.2	1.3
Louisiana	19.8	8.6	16.9	12.5	13.5	21.3	11.9	15.4	7.0	12.9	8.7
Missouri	6.0	3.4	6.6	4.3	4.5	9.2	8.3	5.1	3.0	5.6	4.8
New Mexico	67.7	10.1	17.5	25.8	28.0	39.6	6.9	28.1	13.5	21.6	17.0
Texas	27.8	19.7	24.9	10.1	20.2	24.2	16.9	27.1	17.3	24.0	15.3
United States	21.0	15.0	16.2	7.3	14.5	18.5	13.4	11.4	6.4	10.0	7.3

Sources: Census Population: Bureau of the Census, Characteristics of the Population, ***Number of Inhabitants***, United States Summary, Government Printing Office, 1983. 1986 estimate: Bureau of the Census, Current Population Reports, ***Local Population Estimates***, Government Printing Office, 1982. Projections For United States, Louisiana and Kansas: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 937, ***Provisional Projections of the Population of States, by Age and Sex: 1980 to 2000***, Government Printing Office, 1983. Projections for Other States: Oklahoma State Data Center, Oklahoma Department of Commerce, ***Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010***, January, 1987. Pollard, Forrest H., Mary A. McGehee and Brian R. Mills, ***Provisional Projections of the Population of the State of Arkansas, by County, 1980-2000***, Demographic Bulletin, No. 2, University of Arkansas, May 1986. Division of Local Government, Colorado Department of Local Affairs, ***Colorado Population Projections***, October, 1986. Missouri projections prepared by the Missouri Division of Budget and Planning for the ***Report of the Missouri Opportunity 2000 Commission***, August, 1987. The University of New Mexico, ***Population Projections for New Mexico Counties: 1980-2005***, November, 1986. State Health Planning and Resource Development, Texas Department of Health, Population Data System, ***Total Population Summary Tables, Texas Counties, 1970-2000***, July, 1986.

* The closest we can come to current population is the 1986 population estimate.

Table A.6
Percent Distribution of the Population of Oklahoma, by Age and Sex: 1980-2010

Age (in years)	1980		2010	
	Male	Female	Male	Female
Total	48.8	51.2	49.1	50.9
0-4	4.0	3.8	3.3	3.2
5-9	3.9	3.7	3.1	3.0
10-14	4.0	3.7	3.3	3.2
15-19	4.8	4.4	3.6	3.4
20-24	4.8	4.6	3.8	3.6
25-29	4.2	4.1	3.8	3.6
30-34	3.6	3.7	3.5	3.3
35-39	3.0	3.1	3.4	3.2
40-44	2.5	2.6	3.6	3.4
45-49	2.3	2.5	3.8	3.6
50-54	2.4	2.6	3.6	3.6
55-59	2.3	2.6	3.1	3.3
60-64	2.1	2.3	2.4	2.7
65-69	1.8	2.2	1.7	2.1
70-74	1.4	1.9	1.2	1.8
75-79	0.9	1.6	0.9	1.4
80-84	0.5	1.0	0.6	1.1
85 +	0.3	0.8	0.4	1.4

Source: Oklahoma State Data Center, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, Oklahoma City, 1987.

Table A.7
Percent Distribution of the Population of the United States, by Age and Sex: 1980-2010

Age (in years)	1980		2010	
	Male	Female	Male	Female
Total	48.5	51.5	48.7	51.3
0-4	3.7	3.5	3.2	3.1
5-9	3.8	3.6	3.2	3.0
10-14	4.1	4.0	3.2	3.1
15-19	4.7	4.6	3.4	3.2
20-24	4.7	4.7	3.6	3.4
25-29	4.3	4.3	3.5	3.4
30-34	3.8	4.0	3.1	3.1
35-39	3.0	3.1	3.1	3.1
40-44	2.5	2.6	3.4	3.4
45-49	2.4	2.5	3.8	3.8
50-54	2.5	2.8	3.7	3.8
55-59	2.4	2.7	3.2	3.4
60-64	2.1	2.4	2.7	3.1
65-69	1.8	2.1	2.0	2.2
70-74	1.2	1.7	1.3	1.7
75-79	0.8	1.4	1.0	1.5
80-84	0.4	0.8	0.7	1.3
85 +	0.3	0.7	0.6	1.7

Source: Bureau of the Census, Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*, U.S. Government Printing Office, Washington, D.C., 1984.

Table A.8
Percent Distribution of the Population of United States and Oklahoma, by Age: 1980-2010

Age (in years)	1980		2010	
	U.S.	OK	U.S.	OK
Total	100.0	100.0	100.0	100.0
0-4	7.2	7.7	6.3	6.5
5-9	7.3	7.6	6.2	6.2
10-14	8.1	7.6	6.3	6.5
15-19	9.4	9.2	6.8	7.0
20-24	9.3	9.4	7.1	7.6
25-29	8.6	8.4	6.8	7.3
30-34	7.8	7.4	6.2	6.8
35-39	6.2	6.0	6.2	6.6
40-44	5.1	5.1	6.8	7.0
45-49	4.9	4.9	7.6	7.4
50-54	5.2	5.0	7.6	7.2
55-59	5.1	5.0	6.6	6.3
60-64	4.5	4.3	5.7	5.1
65-69	3.9	4.1	4.1	3.8
70-74	3.0	3.4	3.0	2.9
75-79	2.1	2.4	2.4	2.3
80-84	1.3	1.4	2.0	1.7
85 +	1.0	1.1	2.3	1.8

Source: Bureau of the Census Detailed Population Characteristics, Part 1, United States Summary; *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*; U.S. Government Printing Office, Washington, D.C. 1984; *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, Oklahoma State Data Center, Oklahoma Department of Commerce, 1987.

Table A.9

Number and Percent of Elementary, High School and College Age Population, Age 5 to 24 Years, Oklahoma and the United States: 1980-2010

	Census				Projections					
	1970		1980		1990		2000		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%
Oklahoma										
Elementary (5-13)	440,800	17.5	410,600	13.6	470,900	13.7	492,100	13.1	461,700	11.4
High School (14-17)	198,700	7.8	211,200	6.9	188,700	5.5	228,700	6.1	219,900	5.4
College (18-24)	300,800	11.7	401,700	13.3	357,300	10.4	376,100	10.0	417,700	10.3
United States										
Elementary (5-13)	36,650,000	18.0	31,159,000	13.8	32,189,000	12.9	34,382,000	12.8	31,887,000	11.3
High School (14-17)	15,839,000	7.8	16,247,000	7.2	12,950,000	5.2	15,382,000	5.7	14,983,000	5.3
College (18-24)	23,697,000	11.7	30,022,000	13.2	25,794,000	10.3	24,601,000	9.2	27,655,000	9.8

Source: Bureau of the Census, Current Population Reports, Series P-25, No. 952, *Projections of the Population of the United States, by Age, Sex, and Race: 1983 to 2080*, U.S. Government Printing Office, Washington, D.C., 1984; Oklahoma State Data Center, *Population Projections for the State of Oklahoma, by Age and Sex: 1980-2010*, Oklahoma Department of Commerce, Oklahoma City, 1987.

Table A.10

Number and Percent of Inmigrants, Outmigrants and Net Migrants by Region/State, Oklahoma: 1975-1980*

	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
TOTAL	382,721	100.0	265,903	100.0	116,818	100.0
Northeastern Region	24,742	6.5	9,771	3.7	14,971	12.8
North Central Region	105,612	27.6	56,180	21.1	49,432	42.3
Missouri	20,341	5.3	13,198	5.0	7,143	6.1
Kansas	28,099	7.3	19,404	7.3	8,695	7.4
Other Northcentral States	57,172	14.9	23,578	8.9	33,594	28.8
Southern Region	156,112	40.8	135,492	51.0	20,620	17.7
Arkansas	19,870	5.2	16,565	6.2	3,305	2.8
Texas	76,825	20.1	75,820	28.5	1,005	0.8
Other Southern States	59,417	15.5	43,107	16.2	16,310	14.0
Western Region	96,255	25.2	64,460	24.2	31,795	27.2
Colorado	12,280	3.2	10,696	4.0	1,584	1.4
California	48,439	12.7	24,405	9.2	24,034	20.7
Other Western States	35,536	9.3	29,359	11.0	6,177	5.2

Source: Bureau of the Census, 1980 Census Population, Volume 2, Subject Reports, *Geographical Mobility for States and the Nation*, U.S. Government Printing Office, Washington, D.C, 1985.

* Excludes migration to and from abroad. A total of 41,000 or 10% of inmigrants to the state were from abroad. Data are available only on the number of inmigrants from abroad.

Table A.11

Number and Percent of Total Inmigrants, Outmigrants and Net Migrants by Age, Oklahoma: 1975-1980

Age 1980 (in years)	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	423,565	100.0	265,903	100.0	157,662	100.0
5-9	44,720	10.6	27,811	10.6	16,909	10.70
10-14	38,740	9.1	21,904	8.2	16,836	10.57
15-19	46,421	11.0	24,975	9.4	21,446	13.60
20-24	67,553	15.9	42,123	15.8	25,430	16.12
25-29	62,110	14.8	45,363	17.1	16,747	10.62
30-34	48,526	11.4	32,831	12.3	15,695	9.85
35-39	33,181	7.8	18,026	6.8	15,155	9.61
40-44	22,145	5.2	12,962	4.9	9,183	5.82
45-49	14,445	3.4	9,530	3.6	4,915	3.11
50-54	12,209	2.9	6,633	2.5	5,576	3.50
55-59	9,942	2.3	6,248	2.3	3,694	2.34
60-64	7,680	1.8	4,557	1.7	3,123	2.00
65-69	6,735	1.6	4,233	1.6	2,502	1.88
70-74	3,790	0.9	2,997	1.1	793	.50
75-79	2,556	0.6	2,469	0.9	87	.05
80-84	1,511	0.4	1,594	0.6	- 83	- 0.05
85 +	1,301	0.3	1,647	0.6	- 346	- 0.22

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

Table A.12
Number and Percent of Male Inmigrants, Outmigrants and Net Migrants by Age, Oklahoma: 1975-1980

Age 1980 (in years)	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	223,253	100.0	135,434	100.0	87,819	100.00
5-9	23,086	10.3	14,076	10.4	9,010	10.32
10-14	20,078	9.0	10,637	7.8	9,441	10.72
15-19	25,562	11.4	12,842	9.5	12,720	14.52
20-24	36,909	16.6	21,975	16.3	14,934	17.00
25-29	33,552	15.1	23,605	17.5	9,947	11.30
30-34	25,082	11.3	17,775	13.1	7,307	8.30
35-39	17,744	7.9	9,284	6.8	8,460	9.60
40-44	12,465	5.6	7,336	5.4	5,129	5.80
45-49	7,433	3.3	5,245	3.9	2,188	2.50
50-54	6,286	2.8	3,288	2.4	2,998	3.40
55-59	4,938	2.2	2,926	2.2	2,012	2.32
60-64	3,633	1.6	2,018	1.5	1,615	1.80
65-69	3,159	1.4	1,730	1.3	1,429	1.60
70-74	1,517	0.7	1,250	0.9	267	0.30
75-79	1,090	0.5	677	0.5	413	0.50
80-84	388	0.2	465	0.3	−77	−0.08
85 +	331	0.1	305	0.2	26	0.03

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

Table A.13

Number and Percent of Female Inmigrants, Outmigrants and Net Migrants by Age, Oklahoma: 1975-1980

Age 1980 (in years)	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	200,312	100.0	130,469	100.0	69,843	100.0
5-9	21,634	10.8	13,735	10.5	7,899	11.31
10-14	18,662	9.3	11,267	8.6	7,395	10.59
15-19	20,859	10.4	12,133	9.3	8,726	12.49
20-24	30,644	15.3	20,148	15.4	10,496	15.03
25-29	28,558	14.3	21,758	16.7	6,800	9.74
30-34	23,444	11.7	15,056	11.5	8,388	12.01
35-39	15,437	7.7	8,742	6.7	6,695	9.58
40-44	9,680	4.8	5,626	4.3	4,054	5.80
45-49	7,012	3.5	4,285	3.3	2,727	3.90
50-54	5,923	3.0	3,345	2.6	2,578	3.69
55-59	5,004	2.5	3,322	2.5	1,682	2.41
60-64	4,047	2.0	2,539	2.0	1,508	2.16
65-69	3,576	1.8	2,503	1.9	1,073	1.54
70-74	2,273	1.1	1,747	1.3	526	0.75
75-79	1,466	0.7	1,792	1.5	− 326	− 0.47
80-84	1,123	0.6	1,129	0.9	− 6	− 0.01
85 +	970	0.5	1,342	1.0	− 372	− 0.52

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

Table A.14

Number and Percent of Inmigrants, Outmigrants and Net Migrants by Race, Oklahoma: 1975-1980

	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	423,565	100.0	265,903	100.0	157,662	100.0
White	363,815	85.9	234,381	88.1	129,434	82.1
Black	27,140	6.4	16,885	6.4	10,301	6.5
American Indian	13,150	3.1	8,913	3.3	4,237	2.7
Asian and Pacific Islander	10,923	2.6	2,634	1.0	8,289	5.3
Other *	8,537	2.0	3,090	1.2	5,401	3.4

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

* Persons of Spanish Origin, who may fall within all other racial categories, comprise the largest portion of this category. A total of 16,342 persons of Spanish Origin moved into the state, while 7,425 moved out, leaving a net of 8,917 or 5.7 percent of all net migrants. About one-half of Hispanics in 1980 classified themselves as White, therefore a portion of White migrants were also Hispanic.

Table A.15
Number and Percent of Inmigrants, Outmigrants and Net Migrants by Marital Status and Sex Age 15 Years and Above, Oklahoma: 1975-1980

	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	340,105	100.0	216,188	100.0	123,917	100.0
Now Married	211,077	62.0	131,345	60.8	79,732	64.3
Widowed	9,429	2.8	8,498	3.9	931	0.7
Divorced or Separated	31,837	9.4	23,838	11.0	7,999	6.4
Never Married	87,762	25.8	52,507	24.3	35,255	28.6
Male	180,089	100.0	110,721	100.0	69,368	100.0
Now Married	106,683	59.2	66,432	60.0	40,251	58.0
Widowed	1,501	0.8	1,326	1.2	175	0.3
Divorced or Separated	14,871	8.3	10,526	9.5	4,345	6.3
Never Married	57,034	31.7	32,437	29.3	24,597	35.4
Female	160,016	100.0	105,467	100.0	54,549	100.0
Now Married	104,394	65.2	64,913	61.6	39,481	72.4
Widowed	7,928	5.0	7,172	6.8	756	1.4
Divorced or Separated	16,966	10.6	13,312	12.6	3,654	6.7
Never Married	30,728	19.2	20,070	19.0	10,658	19.5

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

Table A.16

Number and Percent of Inmigrants, Outmigrants and Net Migrants by Years of School Completed and Sex Age 25 Years and Above, Oklahoma: 1975-1980

		Inmigrants		Outmigrants		Net Migrants	
		No.	%	No.	%	No.	%
Total		226,131	100.0	149,090	100.0	77,041	100.0
Elementary:	0 - 8 Years	20,507	9.1	11,272	7.6	9,235	12.0
High School:	1 - 3 Years	26,935	11.9	15,900	10.6	11,035	14.3
	4 Years	78,278	34.6	45,987	30.8	32,291	42.0
College:	1 - 3 Years	48,667	21.5	33,397	22.4	15,270	19.8
	4 + Years	51,744	22.9	42,534	28.6	9,210	11.9
Male		117,618	100.0	75,904	100.0	41,714	100.0
Elementary:	0 - 8 Years	10,501	8.9	4,995	6.6	5,506	13.2
High School:	1 - 3 Years	11,493	9.8	6,415	8.4	5,078	12.2
	4 Years	36,011	30.6	20,721	27.3	15,290	36.6
College:	1 - 3 Years	25,896	22.0	17,051	22.4	8,845	21.2
	4 + Years	33,717	28.7	26,722	35.3	6,995	16.8
Female		108,513	100.0	73,186	100.0	35,327	100.0
Elementary:	0 - 8 Years	10,006	9.2	6,277	8.6	3,729	10.6
High School:	1 - 3 Years	15,442	14.2	9,485	13.0	5,957	16.9
	4 Years	42,267	39.0	25,266	34.5	17,001	48.1
College:	1 - 3 Years	22,771	21.0	16,346	22.3	6,425	18.2
	4 + Years	18,027	16.6	15,812	21.6	2,215	6.2

Source: U. S. Bureau of the Census, 1980 Census Population, Volume 2, Subject Reports, *Geographical Mobility for States and the Nation*, U.S. Government Printing Office, Washington, D.C., 1985

Table A.17

Number and Percent of Inmigrants, Outmigrants and Net Migrants by Employment Status and Sex, Age 16 Years and Above, Oklahoma: 1975-1980

	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	332,607	100.0	212,009	100.0	120,598	100.0
Employed	189,007	56.8	124,697	58.8	64,310	53.3
Unemployed	10,718	3.2	8,110	3.8	2,608	2.2
Armed Forces	25,853	7.8	14,268	6.7	11,585	9.6
Not in Labor Force	107,029	32.2	64,934	30.7	42,095	34.9
Male	176,165	100.0	108,658	100.0	67,507	100.0
Employed	114,718	65.1	74,122	68.3	40,596	60.1
Unemployed	5,697	3.2	4,244	3.9	1,453	2.2
Armed Forces	24,249	13.8	13,198	12.1	11,051	16.4
Not in Labor Force	31,501	17.9	17,094	15.7	14,407	21.3
Female	156,442	100.0	103,351	100.0	53,091	100.0
Employed	74,289	47.5	50,575	49.0	23,714	44.7
Unemployed	5,021	3.2	3,866	3.7	1,155	2.2
Armed Forces	1,604	1.0	1,070	1.0	534	1.0
Not in Labor Force	75,528	48.3	47,840	46.3	27,688	52.1

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

Table A.18

Number and Percent of Inmigrants, Outmigrants and Net Migrants by Occupation, Age 16 Years and Above, Oklahoma: 1975-1980

Occupation	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	189,007	100.0	124,697	100.0	64,310	100.0
Executive, Administrative and Managerial	20,587	10.9	16,467	13.2	4,120	6.4
Professional Specialty	28,445	15.0	21,077	16.9	7,368	11.4
Technicians and Related Support	7,700	4.1	5,465	4.4	2,235	3.5
Sales	20,132	10.7	12,948	10.4	7,184	11.2
Administrative Support, including Clerical	27,207	14.4	20,484	16.4	6,723	10.4
Private Household	732	0.4	402	0.3	330	0.5
Protective Service	1,758	0.9	1,279	1.0	479	0.7
Service, Except Protective and Household	21,742	11.5	11,408	9.1	10,334	16.1
Farming, Forestry and Fishing	3,447	1.8	2,373	1.9	1,074	1.8
Precision Production, Crafts and Repair	26,296	13.9	15,471	12.4	10,825	16.8
Operators, Fabricators and Laborers	30,961	16.4	17,323	14.0	13,638	21.2
Male	114,718	100.0	74,122	100.0	40,596	100.0
Executive, Administrative and Managerial	15,427	13.4	11,629	15.7	3,798	9.4
Professional Specialty	16,857	14.7	12,392	16.7	4,465	11.0
Technicians and Related Support	4,918	4.3	3,671	4.9	1,247	3.1
Sales	10,176	8.9	7,278	9.8	2,898	7.1
Administrative Support, including Clerical	5,508	4.8	4,636	6.3	872	2.1
Private Household	12	0.0	13	0.0	– 1	0.0
Protective Service	1,580	1.4	1,017	1.4	563	1.4
Service, Except Protective and Household	7,653	6.7	3,734	5.0	3,919	9.6
Farming, Forestry and Fishing	2,910	2.5	1,944	2.6	966	2.4
Precision Production, Crafts and Repair	24,749	21.6	14,420	19.5	10,329	25.4
Operators, Fabricators and Laborers	24,928	21.7	13,388	18.1	11,540	28.5

Table A.18 (Continued)
Number and Percent of Inmigrants, Outmigrants and Net Migrants by Occupation, Age 16 Years and Above, Oklahoma: 1975-1980

Occupation	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Female	74,289	100.0	50,575	100.0	23,714	100.0
Executive, Administrative and Managerial	5,160	6.9	4,838	9.6	322	1.4
Professional Specialty	11,588	15.6	8,685	17.2	2,903	12.2
Technicians and Related Support	2,782	3.7	1,794	3.5	988	4.2
Sales	9,956	13.4	5,670	11.2	4,286	18.1
Administrative Support, including Clerical	21,699	29.2	15,848	31.3	5,851	24.7
Private Household	720	1.0	389	0.8	331	1.4
Protective Service	178	0.2	262	0.5	−84	−0.4
Service, Except Protective and Household	14,089	19.0	7,674	15.2	6,415	27.1
Farming, Forestry and Fishing	537	0.7	429	0.8	108	0.5
Precision Production, Crafts and Repair	1,547	2.1	1,051	2.1	496	2.1
Operators, Fabricators and Laborers	6,033	8.2	3,935	7.8	2,098	8.7

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

Table A.19

Number and Percent of Inmigrants, Outmigrants and Net Migrants by Industry and Sex, Employed and Experienced Unemployed, Age 16 Years and Over, Oklahoma: 1975-1980

	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	198,764	100.0	132,075	100.0	66,689	100.0
Agriculture, Forestry and Fisheries	3,827	1.9	3,003	2.3	824	1.2
Mining	12,960	6.5	5,558	4.2	7,402	11.1
Construction	13,581	6.8	9,297	7.0	4,284	6.4
Manufacturing	34,042	17.1	24,037	18.2	10,005	15.0
Transportation, Communication and Public Utilities	13,601	6.8	9,547	7.2	4,054	6.1
Wholesale Trade	8,589	4.3	6,318	4.8	2,271	3.4
Retail Trade	35,345	17.8	21,394	16.2	13,951	21.0
Finance, Insurance and Real Estate	9,790	4.9	7,491	5.7	2,299	3.4
Business and Repair Services	8,557	4.3	6,399	4.8	2,158	3.2
Personal Services	5,953	3.0	3,529	2.7	2,424	3.6
Entertainment and Recreation Services	1,954	1.0	1,692	1.3	262	0.4
Professional and Related Services	40,894	20.6	27,752	21.0	13,142	19.8
Public Administration	9,671	2.0	6,058	4.6	3,613	5.4
Male	119,980	100.0	78,028	100.0	41,952	100.0
Agriculture, Forestry and Fisheries	3,091	2.6	2,250	2.9	841	2.0
Mining	11,329	9.4	4,807	6.2	6,522	15.5
Construction	12,505	10.4	8,463	10.8	4,042	9.6
Manufacturing	24,969	20.8	16,995	21.8	7,974	19.0
Transportation, Communication and Public Utilities	10,585	8.8	7,271	9.3	3,314	7.9
Wholesale Trade	6,657	5.5	4,608	5.9	2,049	4.9
Retail Trade	17,144	14.3	10,348	13.3	6,796	16.2
Finance, Insurance and Real Estate	3,967	3.3	3,033	3.9	934	2.2
Business and Repair Services	5,760	4.8	4,228	5.4	1,532	3.6
Personal Services	1,502	1.3	1,104	1.4	398	1.0
Entertainment and Recreation Services	1,160	1.0	957	1.2	203	0.5
Professional and Related Services	15,321	12.8	10,374	13.3	4,947	11.8
Public Administration	5,990	5.0	3,590	4.6	2,400	5.8

Table A.19 (continued)
Number and Percent of Inmigrants, Outmigrants and Net Migrants by Industry and Sex, Employed and Experienced Unemployed, Age 16 Years and Over, Oklahoma: 1975-1980

	Inmigrant		Outmigrant		Net Migrant	
	No.	%	No.	%	No.	%
Female	78,784	100.0	54,047	100.0	24,737	100.0
Agriculture, Forestry and Fisheries	736	1.0	753	1.4	– 17	– 0.1
Mining	1,631	2.1	751	1.4	880	3.6
Construction	1,076	1.4	834	1.5	242	1.0
Manufacturing	9,073	11.5	7,042	13.0	2031	8.2
Transportation, Communication and Public Utilities	3,016	3.8	2,276	4.2	740	3.0
Wholesale Trade	1,932	2.5	1,710	3.2	222	0.9
Retail Trade	18,201	23.1	11,046	20.4	7,155	28.9
Finance, Insurance and Real Estate	5,823	7.4	4,458	8.3	1,365	5.5
Business and Repair Services	2,797	3.6	2,171	4.0	626	2.5
Personal Services	4,451	5.6	2,425	4.5	2,026	8.2
Entertainment and Recreation Services	794	1.0	735	1.4	59	0.2
Professional and Related Services	25,573	32.4	17,378	32.2	8,195	33.2
Public Administration	3,681	4.6	2,468	4.6	1,213	4.9

Source: Bureau of the Census, Census of Population, 1980, *County to County Migration Flows* (machine-readable data file), Washington, D.C., 1984.

Table A.20

Number and Percent of Inmigrants, Outmigrants and Net Migrants by Income* and Sex, Age 15 Years and Above, Oklahoma: 1975-1980

	Inmigrants		Outmigrants		Net Migrants	
	No.	%	No.	%	No.	%
Total	281,623	100.0	184,527	100.0	97,096	100.0
Under $3,000	64,590	22.9	38,132	20.7	26,458	27.2
$3,000 - $9,999	110,234	39.1	69,795	37.8	40,439	41.6
$10,000 - $14,999	43,933	15.6	30,533	16.5	13,400	13.8
$15,000 - $19,999	24,427	8.7	17,766	9.6	6,661	6.9
$20,000 - $24,999	15,873	5.6	11,784	6.4	4,089	4.2
$25,000 +	22,566	8.0	16,517	8.9	6,049	6.2
Male	165,930	100.0	104,599	100.0	61,331	100.0
Under $3,000	23,027	13.9	12,296	11.8	10,731	17.5
$3,000 - $9,999	56,304	33.9	32,570	31.1	23,734	38.7
$10,000 - $14,999	30,297	18.2	19,322	18.5	10,975	17.9
$15,000 - $19,999	20,343	12.3	14,534	13.9	5,809	9.5
$20,000 - $24,999	14,548	8.8	10,495	10.0	4,053	6.6
$25,000 +	21,411	12.9	15,382	14.7	6,029	9.8
Female	115,693	100.0	79,928	100.0	35,765	100.0
Under $3,000	41,563	35.9	25,836	32.3	15,727	44.0
$3,000 - $9,999	53,930	46.6	37,225	46.6	16,705	46.7
$10,000 - $14,999	13,636	11.8	11,211	14.1	2,425	6.8
$15,000 - $19,999	4,084	3.5	3,232	4.0	852	2.4
$20,000 - $24,999	1,325	1.1	1,289	1.6	36	0.1
$25,000 +	1,155	1.0	1,135	1.4	20	0.1

Source: Bureau of the Census, 1980 Census of Population, Volume 2, Subject Reports, *Geographical Mobility for States and the Nation*, U. S. Government Printing Office, Washington, D.C., 1985.

* Only those migrants who have an income are given in this table.

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